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6209 JAN 7 1922

D. M. Shoemaker.
JAN 7 1922

California Seed Company



GENERAL CATALOG 1922

Seeds

Trees

Plants

Fertilizers

Insecticides

Sprayers

Garden Tools

Implements

Incubators

Brooders and Poultry Supplies

147-149 Market Street

San Francisco, Calif.

WHEN TO PLANT VEGETABLE SEEDS

JANUARY

Artichoke Roots
Asparagus Seed
Beets
Beans, Windsor
Broccoli
Brussels Sprouts
Cabbage
Cauliflower
Chive Plants
Cress
Corn Salad
Garlic Sets
Horse Radish Sets
Kale
Kohl Rabi
Leek
Lettuce
Mustard
Onion Sets
Parsley
Peas
Radish
Rhubarb Roots
Spinach
Herb Plants

FEBRUARY

Artichoke Roots
Artichoke Seed
Asparagus Roots
Asparagus Seed
Beets
Beans, Windsor
Beans, Bush
Beans, Pole
Broccoli
Brussels Sprouts
Cabbage
Cabbage Plants
Carrot
Cauliflower
Chervil
Chicory
Corn Salad
Cress
Dandelion (French)
Garlic Sets
Horse Radish
Kale
Kohl Rabi
Leek
Lettuce
Mustard
Onion Seed
Onion Sets
Parsley
Parsnip
Peas
Peppers
Potatoes
Radish
Rhubarb Seed
Rhubarb Roots
Salsify
Spinach
Tomato
Tomato Plants
Turnip
Ruta Bagas
Herb Plants

MARCH

Artichoke Roots
Artichoke Seed

Asparagus Seed
Asparagus Roots
Beets
Beans, Bush
Beans, Pole
Beans, Lima
Broccoli
Brussels Sprouts
Cabbage
Cabbage Plants
Carrot
Cauliflower
Chervil
Chicory
Corn
Corn Salad
Cress
Cucumbers
Dandelion
Egg Plant
Garlic Sets
Horse Radish Sets
Kale
Kohl Rabi
Leek
Lettuce
Watermelon
Musk Melon
Mustard
Okra
Onion Seed
Onion Sets
Parsley
Parsnip
Peas
Pepper
Potatoes
Pumpkins
Radish
Rhubarb Seed
Rhubarb Roots
Salsify
Spinach
Tomato
Tomato Plants
Turnip
Ruta Bagas
Herb Plants

APRIL

Artichoke Seed
Asparagus Seed
Beets
Beans, Bush
Beans, Pole
Beans, Lima
Cabbage
Cabbage Plants
Carrot
Cauliflower
Cauliflower Plants
Chervil
Chives
Chicory
Corn
Corn Salad
Cress
Cucumbers
Dandelion
Egg Plant
Egg Plant Plants
Garlic Sets

Horse Radish Sets
Kale
Kohl Rabi
Leek
Lettuce
Melons
Mustard
Okra
Onion
Onion Sets
Parsley
Parsnip
Peas
Pepper
Pepper Plants
Potatoes
Potatoes, Sweet
Pumpkins
Radish
Rhubarb Seed
Rhubarb Roots
Salsify
Spinach
Tomatoes
Tomato Plants
Turnips
Ruta Bagas
Herb Plants

MAY

Beans, Dwarf
Beans, Pole
Cabbage
Carrot
Cauliflower
Chervil
Corn
Cress
Cucumber
Dandelion
Egg Plant
Kale
Kohl Rabi
Leek
Lettuce
Melons
Mustard
Okra
Onion
Parsley
Peas
Peppers
Potatoes
Pumpkins
Radish
Salsify
Spinach
Tomato
Turnip
Ruta Baga
Herb Plants

JUNE

Beans, Bush
Beans, Pole
Cabbage
Cauliflower
Corn
Cress
Cucumber
Lettuce
Melons
Okra
Peas
Pumpkins

Radish
Spinach
Ruta Baga

JULY

Beets
Beans, Bush
Broccoli
Brussels Sprouts
Cauliflower
Cress
Kale
Lettuce
Mustard
Peas
Radish
Spinach
Turnip
Ruta Baga

AUGUST

Beets
Broccoli
Brussels Sprouts
Cabbage
Carrot
Cauliflower
Corn Salad
Cress
Endive
Garlic Sets
Kale
Kohl Rabi
Lettuce
Mustard
Onion
Parsley
Parsnip
Peas
Radish
Spinach
Turnip

SEPTEMBER

Beets
Brussels Sprouts
Broccoli
Cabbage
Carrot
Cauliflower
Chervil
Corn Salad
Cress
Chicory
Dandelion
Endive
Kale
Kohl Rabi
Leek
Lettuce
Mustard
Onion
Parsley
Parsnip
Peas
Radish
Spinach
Turnip

OCTOBER

Beets
Broad Beans
Broccoli

Brussels Sprouts
Cabbage
Carrot
Cauliflower
Chervil
Corn Salad
Cress
Chicory
Dandelion
Endive
Kale
Kohl Rabi
Leek
Lettuce
Mustard
Onion
Onion Sets
Parsley
Parsnip
Peas
Radish
Spinach
Turnip

NOVEMBER

Artichoke Roots
Broad Beans
Broccoli
Brussels Sprouts
Cabbage
Carrot
Cauliflower
Cress
Kale
Kohl Rabi
Leek
Lettuce
Mustard
Onion
Onion Sets
Parsley
Parsnip
Peas
Radish
Rhubarb Roots
Spinach
Turnip

DECEMBER

Artichoke Roots
Broad Beans
Broccoli
Brussels Sprouts
Cabbage
Carrot
Cauliflower
Chives
Cress
Garlic Sets
Horse Radish Sets
Kale
Leek
Lettuce
Mustard
Onion Sets
Parsley
Peas
Radish
Rhubarb Roots
Spinach

WHEN ORDERING TEAR OUT THIS SHEET



Our Retail Store, 147-149 Market Street, San Francisco, Cal.

This is our Thirteenth Annual Catalogue. During these years we have served and still retain as our customers some of the largest interests, not only in California and the West Coast States, but in many other sections of the globe. It makes us feel good in the morning in opening our mail to find such flattering testimonials telling of the fine results obtained from our seed. We call your attention to the following testimonials. These are samples of the many such letters we receive yearly:

IT PAYS TO KNOW WHERE TO BUY GOOD SEED

Santa Cruz, Oct. 11, 1921.

California Seed Co.,
147 Market Street,
San Francisco, Cal.

Dear Sirs: While in your city last summer I bought one of your "Neverfail" Gopher Guns. Am glad to state that it "never fails," as the name implies.—G. K.

Lodi, Cal., Nov. 8, 1921.

California Seed Co.:

The seeds received from you are certainly showing up fine. Peas planted 21st ult. (two weeks, four days ago), are three inches high, and peas planted two weeks ago today are an inch high. The radish, lettuce, spinach, beet, carrots, seem to be 100% fertile—never saw such a good strand.

Please send me package Pansy seed (mixed), 50c, and one package Silver G. Mixture S. Sweet Peas, 20c.

and oblige,

MRS. U. J. B.

WE HAVE SATISFIED A KING

Let Us Try and Satisfy You

Care of His Excellency Phya Maha Amat
Bangkok, Siam, 29th June, 1920.

The California Seed Co.,
151 Market Street,
San Francisco.

Dear Sirs: I must confess that I am very much impressed by the success of your seeds, a few varieties of which a friend of mine has sent to me. I now wish to have those seeds sent to me as listed below.

Hoping to hear from you soon,

Yours faithfully,

PERM SAKDI.



This photograph, taken on October 31, 1920, shows "Ruffled Giant Petunias" grown from seed from California Seed Co. The first blooms came out May 1st and the bed was a mass of bloom the whole summer, and they continued to bloom until the frost got them about the middle of November.

Grown on the farm of Mrs. W. G. Thompson on the "Golf Links Road," or "Hagen Road," about three miles east of Napa, Napa County, Calif.



Growers Protect With Red Seal

Removing every chance for substitution as RED SEAL BRAND is sold only in its original trade marked bag—direct from the fields to you.

CERTIFIED Hairy Peruvian Alfalfa Seed

offers positive protection in your securing GENUINE HAIRY PERUVIAN ALFALFA SEED. You now have a brand that is the SIGN OF HONOR—RED SEAL BRAND—and we growers stand back of it.

Study the bag above—that's a sure way to secure certified Hairy Peruvian Alfalfa Seed. Look for the Blue Tag.



SEND FOR BOOKLET

Our booklet will give you the full details of the Hairy Peruvian Alfalfa Seed Situation. We mail it postpaid on request.

Write for prices and samples.

HUBAM CLOVER

(Annual White Sweet Clover)

Wonderful New Clover That Will Revolutionize Agriculture

This is the wonderful new clover that has caused such a sensation throughout the country. It does in one year all that other clovers do in two years. It reaches three to seven feet in height in from four to seven months after planting. It has grown successfully in every state and in most foreign countries. It is the greatest fertilizing plant known, a wonderful hay and pasture crop, and unsurpassed as a honey producer.

At Iowa Experiment Station, after the harvesting of the small grain crop, it produced six times the growth of medium red clover and Mammoth clover, when seeded with the small grain. The drought resistant qualities of this clover are remarkable; without irrigation and with less than one inch rainfall after seeding it has made a growth of seven feet. 50,000 sample packages of Hubam seed have been sent out for trial and it has succeeded in every state and many foreign countries. Its value to agriculture cannot be estimated.

Hubam was discovered by Prof. Hughes of Iowa Agricultural Experiment Station. In 1916 there were only 22

plants. The seed has been carefully multiplied but there was enough seed to plant only a few hundred acres in 1921. It will take years to multiply the seed until the demand can be supplied. There will be great profit in growing Hubam for seed for years to come, as there is a great demand for it from all over the world. 600 pounds of seed per acre has been produced. Last year seed sold for \$10.00 per pound.

DROUGHT RESISTANT

The drought resistant qualities of the clover are reported from several states as remarkable. In one instance, without irrigation and with less than one inch of rainfall after the clover was seeded, it grew to a height of 7 feet and showed no ill effect of the drouth when other vegetation perished in the worst drouth experienced since 1882.

The growth when carefully measured has often averaged over 1½ inches per day, with a maximum under greenhouse conditions of 2½ inches in 15 hours.

HUBAM CLOVER (Cont'd.)**SEED 3 TO 12 POUNDS PER ACRE**

Hubam Clover may be grown either in cultivated rows, in solid seedings with or without a nurse crop, or with any of the small grains as is the custom of seeding the common clovers. In cultivated rows three to four pounds per acre should be used in order to insure perfect stands that can be cultivated with horse or motor drawn cultivators and thus make hand cultivation unnecessary.

In solid seedings about twelve pounds per acre should be used in order to get a thick early stand that will completely cover the ground and prevent the noxious weeds making headway.

Hubam Clover may be seeded in the small grains just as the common clovers are seeded. It will come on after the small grain is harvested. It will not make the maximum crop that it will when seeded alone and until the seed can be greatly multiplied we advise against this method except in experimental acreages.

SEEDING MACHINES USED

Hubam may be seeded with the broadcast seeders just as alfalfa is often seeded, covering the seed very lightly with a surface working tool. It may be seeded with any of the drills or alfalfa or grass seeders. A smaller amount of seed is necessary when seeded with a machine that accurately gauges the depth of the planting.

When seeded in cultivated rows it is quite satisfactory to use the seeding machines, closing the hoes so that the width of rows desired can be had. The hand one-row seeding machines are fairly satisfactory. We have had very good success with an attachment for an ordinary corn planter: a tight seed box and small inverted cone-shaped holes drilled in a solid seeding plate is all that is required.

EARLY PLANTING DESIRABLE

We very much prefer quite early planting. The small plants will withstand quite cold weather and it is much easier to combat the weeds by getting possession of the ground before they start. The early seedings seem to grow a little larger and it gives plenty of time for harvest even in the short seasons of the far northern states. We have matured seed here in Ohio when planted after June 1, but we greatly prefer March and April seedings.

PREPARE FIRM SEED BED

Hubam should be planted on a perfectly firm seed bed with a surface mulch of loose soil. Never plant Hubam on a freshly plowed seed bed. Where the ground is clean because of a previously cultivated crop, the seed-bed should be prepared by surface cultivation only: much greater success with Hubam can thus be obtained.

We have a limited quantity of seed to offer. Price, \$2.50 per pound; 10 pounds, \$20.00. Postpaid.

MELILOTUS ALBA

The time has come in America when every man knows that the soil occasionally needs a rest, but land is too valuable to waste for a season. But when the soil needs a rest, it does not mean it shall be idle now that scientific investigation has given us so-called rest crops. Among the rest crops is WHITE BLOSSOM SWEET CLOVER, which makes excellent hay and at the same time furnishes humus to the soil from its decaying roots. For hay the clover must be cut before the woody fibre stage. Then after it has been cut the plant may be plowed under. The value of sweet clover can be realized when we consider the increased demand during recent years. Not very long ago it was considered a weed, but now a savior of the soil. With its long roots it reaches down into the earth, breaks open the subsoil to light and sunshine and gives the top soil new minerals to renew its productiveness. See page 27



FIELD CORN

LEAMING YELLOW DENT CORN

One of the most desirable standard varieties of yellow corn for fodder and ensilage purposes.

The stalks of the Leaming are of good height, very leafy, broad blades; ears are well filled out, averaging about ten inches in length. Color beautiful golden yellow. Being a medium early variety it will mature further north than most yellow dent types.

All of our seed corn is selected, inspected and hand sorted in the ear before shelling, insuring high quality seed of guaranteed germination. See page 26.

Imported Swedish Improved Seed Oats

Pedigreed and Selected Stock—Algot Brand—Imported by us direct from headquarters.

Reasons why you should sow Improved Swedish Selected Seed Oats of Algot Brand: 1. Maximum yield per acre; 2. Highest standard of quality; 3. Hardy and disease-resisting constitutions.

GOLDEN RAIN WHITE OAT

The highest record for yield of any white oat on poor oatland.

The panicle is quite small but well supplied with fine upstanding branches, which are closely and uniformly furnished with spikelets. The spikelets themselves are small and short with broad glumes, generally only two-flowered.

The grain, though relatively small, is broad, very full, extremely thin-skinned and of a light yellow color.

This plant has the most abundant shoots of all white oats. The yield is remarkably good and it is undoubtedly the earliest white oat.

The straw is strong and will stand up in the roughest weather.

With regard to the quality of soil, Golden Rain is anything but exacting. It is therefore the right sort for rather light and poor oatlands, of which there are many, and it is thus the natural successor of the old common sorts.

Pound, 25cts; 10 pounds, \$2.00.

COOK'S CHINESE CINNAMON VINES**"Dioscorea Batatas"—Headquarters Stock**

COOK'S CINNAMON VINES are the most desirable, easiest grown climbers in the world. They are from China—the land of wonders. Their abundant blossoms perfume the air for a long distance. No words can describe their delicious fragrance.

Perfectly hardy—thriving in all soils, in sun or shade, wet or dry. No insects, blight or disease of any kind ever troubles them, no winter harms. Once planted they will grow a lifetime.

They will quickly climb 30 feet or more, and surround your windows and cover your porches, walks, etc., with a mass of Vines—covered with pretty heart-shaped leaves and a profusion of dainty, white, sweet-scented flowers, making them perfect "Bowers of Beauty." No lover of the beautiful should miss planting Cinnamon Vines. They have a charm unknown to all other climbers. Roots, 15c each. Postpaid.

**HYBRIDIZED POTATO SEED**

FROM THE SEED-BALLS—HEADQUARTERS STOCK.

Millions never saw a Potato Seed Ball. Thousands have tried in vain to get the seed. Now is your opportunity. This unrivaled seed will produce an endless variety of new kinds. Your fortune may be in one of them. They are as easy to grow as tomatoes.



PHOTO OF POTATO SEED BALLS—ONE-HALF NATURAL SIZE.

It is from these that **ALL** valuable new varieties of Potatoes are produced.

Growing new and distinct Seedling Potatoes from the Seed-Ball Seed is intensely interesting. They will be the greatest curiosity of your garden. This seed will positively produce innumerable new kinds, colors, shapes, sizes, and qualities. The product will astonish you. Some may be of immense value and bring you a golden harvest. Every farmer, gardener, and bright boy should plant a few packets. You may be one of the lucky ones. Full directions on every packet.

READ THESE EXTRACTS FROM CUSTOMERS LETTERS.

"I grew 101 Potatoes from one plant of your Potato Seed. Every plant was a different variety." Mrs. Ellen Keener.
 "I raised 50 Hills from one Packet: many kinds and colors; some early, some late. 64 Potatoes in one hill." J. H. Skinner.
 "Your remarkable Potato Seed produced white, pink, red, purple, blue, cream, russet, and black potatoes." W. M. Johnson.
 "Your Potato Seed is a wonder. I grew 115 different varieties from one Packet—the finest I ever saw." C. E. Flint.
 "I grew 45 pounds of Seedling Potatoes from one Packet. I expect wonders from them next year." Thomas Lucas.

Packet 15 cts. 2 for 25c. 5 for 50c. 10 for \$1.

WHAT WORLD'S GREATEST MEN SAID ABOUT AGRICULTURE

The man or woman who refers to farmers or members of their families as "rubes" only exhibits ignorance and lack of proper appreciation.

Here is what some of the really great men of the world thought about those who follow the profession of farming:

George Washington—"Agriculture is the most healthful, most useful, and most noble employment of man."

Napoleon—"Agriculture is the soul and chief foundation of empires; industry produces riches and the happiness of the people. Exportation represents the superabundance and the good use of both."

Thomas Jefferson—"Let the farmer forever more be honored in his calling, for they who labor in the earth are the chosen people of God."

Benjamin Franklin—"There seems to be but three ways for a nation to acquire wealth; the first is by war, as the Romans did in plundering their conquered neighbors—this is robbery; the second by commerce, which is generally cheating; the third by agriculture, the only honest way, wherein man receives a real increase of the seed thrown into the ground, in a kind of continual miracle, wrought by the hand of God in his favor, as a reward for his innocent life and his virtuous industry."

Daniel Webster—"The farmers are the founders of civilization."

Henry Ward Beecher—"He that would look with contempt on the pursuits of the farmer, is not worthy the name of man."

Lord Chatham—"Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land."

Virgil—"Command large fields, but cultivate small ones."

Lord John Russell—"In a moral point of view, the life of the agriculturist is the most pure and holy of any class of men; pure, because it is the most healthful, and vice can hardly find time to contaminate it; and holy because it brings the Deity perpetually before his view, giving him thereby the most exalted notions of supreme power, and the most endearing view of the divine benignity."

Oran Roberts, former Governor of Texas—"Civilization begins and ends with the plow."

Edward Gibbon—"Agriculture is the foundation of manufactures since the productions of nature are the materials of art."

Johnson—"Agriculture not only gives riches to a nation, but the only riches she can call her own."

Edward Everett—"Agriculture seems to be the first pursuit of civilized man. It enables him to escape from the life of the savage, and wandering shepherd, into that of social man, gathered into fixed communities and surrounding himself with the comforts and blessings of neighborhood, country and home. It is agriculture alone that fixes men in stationary dwellings, in villages, towns and cities, and enables the work of civilization, in all its branches, to go on."

Swift—"Whoever makes two ears of corn, or two blades of grass to grow where only one grew before, deserves better of mankind, and does more essential service to his country than the whole race of politicians put together."

We carry a complete line of Poultry Supplies, Incubators and Brooders. Pages 60-61.

MANGEL WURZEL AND SUGAR BEET

One ounce will sow 100 ft. drill, 6 pounds per acre

140 to 150 days required from sowing to maturity

Largely Grown for Feeding Stock

Five or six pounds will sow one acre. The seed should be planted in rows 2 feet apart and thinned to 8 inches in the rows. To obtain the best results from this crop, use deep soil well plowed; if the soil is thin, a liberal application of an honest chemical fertilizer is necessary. The value of beets for stock feeding cannot be overestimated. The results from their use are clearly shown in the improved health and condition of animals, the increased yield of milk in cows, and the great saving of hay. They can be raised at a trifling cost, and selected seed will yield immense crops per acre.

All Stock and Sugar Beets 65c
lb. 10 lbs \$6.00 postpaid.
Write for prices on larger lots.



GOLDEN TANKARD

When the fact is considered that 50 tons of Mangel Wurzel may be grown on a single acre, at a small outlay, the wonder is that every farmer does not profit by it. Mangels grow to a larger size and will produce a greater bulk of roots per acre than sugar beets, but the latter are richer in quality and of superior feeding value.

As all mangels require a deep soil in order to grow well, plow and subsoil at least a foot to eighteen inches and apply plenty of rich stable manure. Sow in April to June, in rows eighteen inches to two feet apart, and thin to eight inches in the rows. Young plants may be transplanted to fill up vacancies. As soon as frost occurs dig the crop.

GIANT HALF SUGAR MANGEL

The roots of this new mangel are more valuable, pound for pound, than those of the best strain of sugar beet, supplying food of very much higher nutritive value and not only are they of better quality but they yield more than twice as much. The roots grow partly out of the ground, which renders the harvesting of the crop very easy. Every progressive farmer should try this new food.

MANGEL—(Danish Sludstrup)

Long, reddish-yellow; grows well above the ground and easy to pull. The mangel is very large, frequently weighing from 15 to 20 pounds. It has repeatedly been awarded a first class certificate by Danish Government, and is doubtless the best mangel in the world. No other crop can match it.

DARK RED GIANT ECKENDORF

Is of cylindrical form and grows mostly above the surface and, like the Sludstrup, is very easy to pull. It has been awarded first class certificate by the Danish Government for its merit as a very heavy cropper, a farmer there having grown 58 tons on one acre.

GOLDEN TANKARD

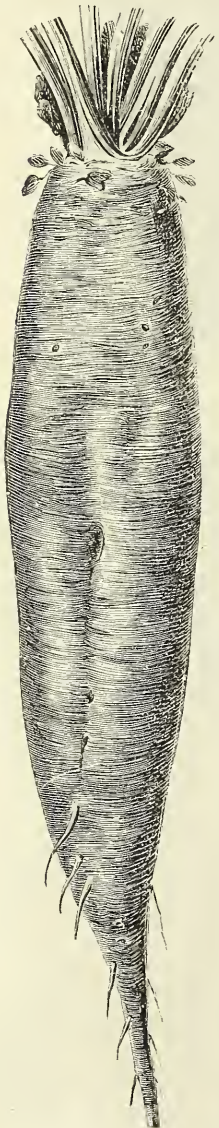
A superior strain of golden fleshed mangel; roots half long and very large. It is particularly rich in milk-producing qualities. It is very easily pulled; exceedingly hardy.

MAMMOTH LONG RED

This is truly a mammoth, a single root often weighing 30 pounds. Enormously productive, smooth and regular in shape, with a small top. They grow half above ground, and are easily harvested.

KLEIN'S WANZLEBEN SUGAR BEET

This is considered the most desirable variety for sugar. It is also desirable for feeding to stock. The roots, while rather shorter than some varieties, are thicker in diameter, and yield an immense crop on rich land. The largest diameter is at, or just below, the surface of the soil, then tapering rather quickly.



MAMMOTH LONG RED

VEGETABLE SEEDS

(Write for prices
on large quantities)

Artichoke, French green globe.....Pkt.. 10c; oz., \$1.25

ASPARAGUS

One ounce will sow 50 feet of row, and produce about 800 plants. Sow the seed early in spring in drills 12 to 14 inches apart, and when well started thin out to 3 inches apart. When one or two years old, transplant into permanent beds, thoroughly trenched, 2 feet or more in depth. Set the plants in rows 2 feet apart, and not less than 18 inches apart in the row. Care should be taken that the roots are well spread, and set at a depth of 6 inches below the level of the bed. Cover only 2 or 3 inches, and fill in gradually as the plants grow. Very little, if any, should be cut the first year after transplanting, but a fair crop can be cut the second year. Every fall after the tops have been cut down apply a dressing of coarse manure, and in the spring fork it in. An occasional top-dressing of salt at the rate of one-half pound per square yard is also beneficial, and keeps down the weeds.



PALMETTO

	Pkt.	Oz.	¼-lb.	Lb.
Asparagus, Conovers colossal, white.....	\$.10	\$.20	\$.45	\$ 1.25
Asparagus, Palmetto, green.....	.10	.20	.45	1.25

ASPARAGUS ROOTS

A saving of one or two years is effected by planting roots. A bed 12 by 40 feet, requiring about 100 roots, should give a sufficient supply for an ordinary family. If planted in rows 3 feet apart and 2 feet between the plants, 7,260 roots will plant an acre.

Asparagus Roots.....35c doz.; \$2.50 per 100



EARLY REFUGEE

BEANS

There are two distinct classes of beans which produce edible pods—the wax or yellow-podded varieties, called also “Butter” Beans, and the green-podded kinds. Both are used in the same way as “Snap” beans. The wax-podded varieties look the most attractive, but some of the green-podded kinds are of better quality and not subject to rust as much as the wax kinds.

Another class is composed of beans used for shelling and cooking when green. Of this class Limas are by far the best quality. Still another class produces beans that are used when ripe and dry. These are called “Field” Beans, as they are usually grown only in large fields and not in gardens.

DWARF OR BUSH BEANS

One pound will sow 100 feet of drill; 40 pounds are required for an acre. They will thrive in any good soil. Plant the seeds 2 inches deep and 3 inches apart, in rows 2 feet apart. Keep well cultivated, as no crop better repays extra labor in this direction.

DWARF GREEN BEANS

	Pkt.	Lb.
French Garden Haricot, long slender, green pod....	\$.15	\$.35
Early Mohawk, straight green flat pod.....	.15	.35
Early Refugee, very productive, round pod.....	.15	.35
Bountiful, early prolific, flat pod.....	.15	.35
Early Valentine, round thick solid pod.....	.15	.35
Canadian Wonder, prolific, long flat pods.....	.15	.35



BURPEE'S STRINGLESS GREEN POD

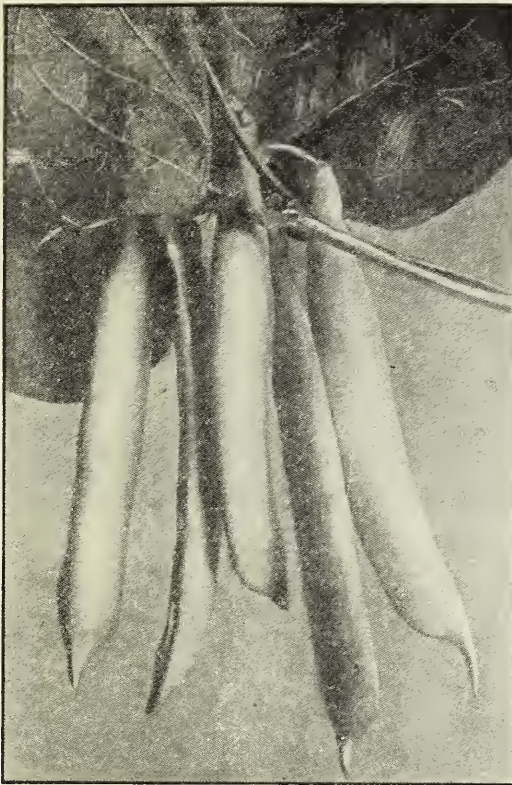
Vegetable Plants

A complete
list of
Vegetable
Plants
ready to
set out are
listed on
Page 85

NURSERY
DEPARTMENT

DWARF WAX BEANS

	Pkt.	Lb.
Davis Crystal Wax, large, brittle, very productive..	.15	.40
Black Wax, early, tender and prolific.....	.15	.40



CRYSTAL WAX

Burpee Stringless Green Pod

This famous Bean, first named and introduced twenty-four years ago, is still unequaled as a first early. It combines unusual hardness, extreme earliness, and wonderful productiveness with handsome appearance and finest quality of pods. Extra-early plantings may be made to produce the earliest crop, and even with later plantings Burpee's Stringless is the quickest to produce pods.

By repeated plantings pods may be had in constant succession from spring until cut off by heavy frosts in the fall. Combined with the extra hardness and early maturity, the pods are of a rich green, very round and straight, five inches long, broad and solidly meaty. They are deeply saddle-backed, caused by the rounded swell of the fleshy sides.

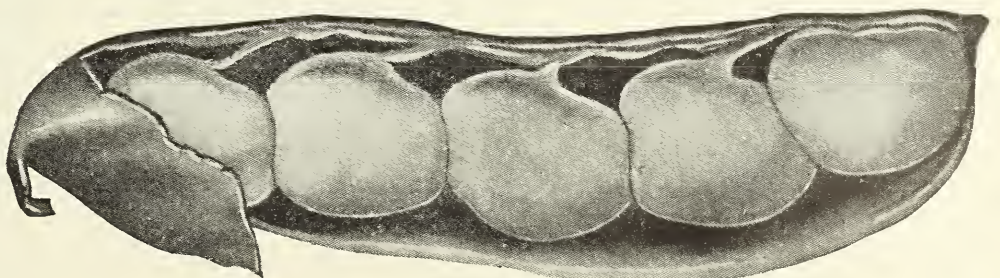
The pods are tender, brittle, and of finest flavor, being entirely stringless even when fully matured. Pkt. 15c, lb. 40c, 10 lbs. \$3.50. Postpaid.

LIMA BEANS

HENDERSON'S BUSH LIMA—

Grows in compact bush form about 18 inches high. The beans are small in size, but of delicious flavor and great productiveness, and about two weeks earlier than the others. Pkt. 15c, lb. 40c, 10 lbs. \$3.50. Postpaid.

BURPEE'S BUSH LIMA—A bush form of true, large Lima. A good yielder, bearing a handsome, large pod, well filled. Pkt. 15c, lb. 40c, 10 lbs. \$3.50. Postpaid.



BURPEE BUSH LIMA BEANS

GOLDEN WAX—A standard sort. One of the earliest beans in the market. The pods are of good length, flat, but quite thick and broad. They are waxy, golden yellow, and of fine, buttery flavor. Hardy and productive. Pkt. 15c, lb. 40c, 10 lbs. \$3.50. Postpaid.



GOLDEN WAX

POLE OR RUNNING BEANS

One pound will plant 50 hills; 30 pounds will plant an acre. The soil should be mellow, rich and warm. Lay the ground out in hills 4 feet apart each way, and set poles 8 or 10 feet long firmly in the hills before putting in the seed. Plant 5 or 6 beans in a hill, and cover about 2 inches deep; leave 3 healthy plants at each pole, and when a few inches high draw a little earth around them as support. They may also be grown without poles, leaving the vine to run. Use the cultivator freely to keep the soil mellow and clean.

Kentucky Wonder, long bearing, tender and brittle	\$.15	\$.35
King of the Garden Lima, immense yielder, best quality .....	.15	.35
London Horticultural, or Italian, pods long flat, absolutely stringless and finest flavor; vines continue bearing for a long period.....	.15	.35
Blue Lake Creaseback, tender, prolific and crisp....	.15	.35
Burger's Stringless, one of the best, stringless.....	.15	.35
Kentucky Wonder Wax, golden yellow podded, stringless bean, highly productive, tender, crisp and of very fine flavor.....	.15	.40
English Broad Windsor or Horse Bean.....	.10	.20
Scarlet Runner, ornamental and very prolific, producing bright scarlet flowers.....	.15	.40

Write for prices on larger quantities.



SWISS CHARD GIANT LUCULLUS

SWISS CHARD OR SPINACH BEET

No vegetable requires less care than this, and it is safe to say that none yields as constantly as this spinach, producing uninterruptedly from July until winter. Also called "Cut and Come Again Spinach."

Sow early in spring, in rows 16 inches apart, and thin out to 6 inches apart in the rows. It can be used all summer when spinach is not available. Later the leaves grow very large, with broad, flat, pure white stems and mid-ribs, which may be cooked like asparagus or made into very good pickles.

	Pkt.	Oz.	¼-lb.	Lb.
Swiss Chard or Spinach Beet.....	\$.10	\$.20	\$.60	\$ 1.75

SWISS CHARD, GIANT LUCULLUS

The largest of all Chards. Very distinct, the leaves being well crumpled. Blonde in color, with broad ribs.

	Pkt.	Oz.	¼-lb.	Lb.
Swiss Chard, Giant Lucullus.....	\$.10	\$.20	\$.60	\$ 2.00

BEETS FOR TABLE USE

The soil best suited for Beet culture is that which is rather light and well enriched. Sow in drills 1 foot apart and 1 inch deep, as early as the ground can be worked; when the plants are large enough thin out to stand 6 inches apart in rows; continue for a succession as late as the middle of July. Keep well cultivated. One ounce will sow 50 feet of drill; 5 or 6 pounds for an acre.

CROSBY'S EGYPTIAN roots are smooth and round in form; of finer quality than the regular Egyptian, combined with same extra-early maturity. Pkt. 10c, oz. 20c, ¼-lb. 45c, lb. \$1.25.

LONG DARK BLOOD—Tops large, with good sized, long roots, tapering and growing even with the surface; dark red; flesh sweet and tender, remaining so until spring. A popular winter sort. An excellent keeper. Pkt. 10c, oz. 15c, ¼-lb. 40c, lb. \$1.25.

BEST EARLY BLOOD TURNIP—A favorite early variety. Roots turnip-shaped, dark red; fine flavor, tender and sweet. Good for winter. Pkt. 10c, oz. 20c, ¼-lb. 45c, lb. \$1.25.



EGYPTIAN BLOOD

ECLIPSE—An extra early variety with round, smooth, blood-red roots. Matures very early and is popular both for market and home garden. Pkt. 10c, oz. 20c, ¼-lb. 45c, lb. \$1.25.

DEWING'S EARLY RED TURNIP—Of good form and flavor. Flesh and top deep blood-red; excellent for early or winter use. Smooth and handsome. Pkt. 10c, oz. 20c, ¼-lb. 45c, lb. \$1.25.



DETROIT BLOOD BEET—The Detroit is one of the best of the dark red turnip beets for main crop. The roots are of perfect turnip shape, always smooth, with a small tap-root. The color of the skin is dark blood red and the flesh deep vermilion red, zoned with a lighter shade. The quality is the very best, sweet and tender. Has a handsome and dark rich color and its delicious taste make it an ideal table Beet. It is also a very desirable sort for the market gardener as it is fine for bunching and its small upright growing tops allowing close planting, making possible the biggest yield per acre of any turnip-shaped variety. Splendid for either summer or fall use, and good for storing over winter. See illustration. Pkt. 10c, oz. 20c, ¼-lb. 50c, lb. \$1.50.



CALIFORNIA SUCCESSION

CABBAGE

It is difficult to give definite cultural directions for cabbage, since it is possible to have good cabbage at all seasons of the year in some parts of the country, and seed can be planted almost any time of the year. There are three good seasons for sowing the seed, however—in September for early spring cabbage, in March for summer and fall cabbage, and in June or July for winter cabbage. The seed sprouts quickly, and it is likely to come up very thick in the seed bed. It should be thinned early, or the plants become spindly, and then do not head well. Transplanted to the field, they should be put twelve inches apart, in rows eighteen inches apart. To prevent the heads splitting open in the field before they are ready to be harvested, the plants should be loosened a little at root. Cabbages require considerable moisture, but too much water causes them to rot very readily.

	Pkt.	Oz.	¼-lb.	Lb.
All Seasons, a fine fall and winter sort	\$.10	\$.35	\$ 1.25	\$ 3.75
Surehead, round, flattened heads, good keeper.....	.10	.40	1.35	4.00
Early Jersey Wakefield, fine large blunt heads.....	.10	.35	1.00	3.50
Early York, very early, excellent quality .....	.10	.35	1.25	3.75
California Succession, good main crop variety.....	.10	.40	1.30	4.00
Large Late Drumhead, very solid large and round.....	.10	.40	1.30	4.00



EARLY WINNIGSTADT

	Pkt.	Oz.	¼-lb.	Lb.
Savoy Drumhead, leaves very curly, hard head.....	.10	.50	1.65	5.00
Red Rock, a good winter variety, very firm.....	.10	.50	1.65	5.00
Danish Ball Head, very solid.....	.10	.50	1.35	5.00

BRUSSELS SPROUTS

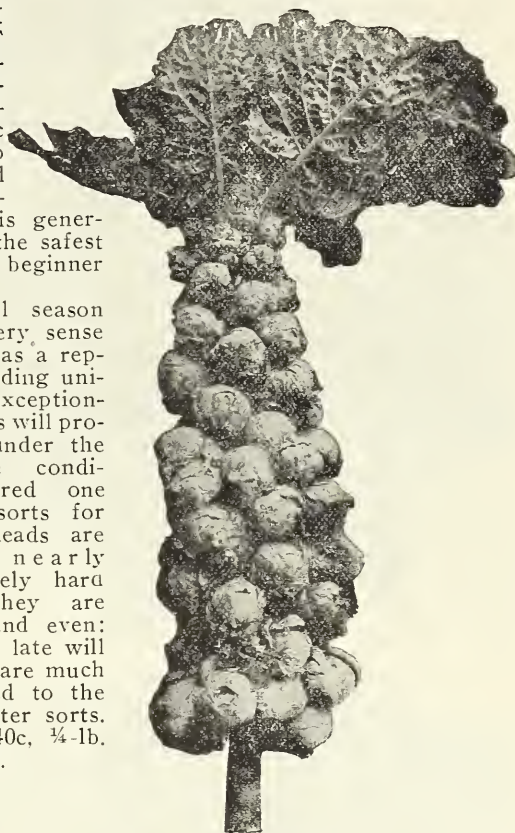
One ounce will produce 3,000 plants. Sow as directed for Broccoli, and set the plants 2½ feet apart each way. They require a long season of growth, but with suitable soil and liberal manuring an excellent crop of this most delicious vegetable can be secured.

	Pkt.	Oz.	¼-lb.	Lb.
Improved Half Dwarf, best and purest strain.....	\$.10	\$.40	\$ 1.35	\$ 4.00

PRIMUM LARGE FLAT DUTCH—

This is a cabbage of prominent economic importance to the home and market garden alike, and is generally conceded the safest for the new beginner to plant.

It is an all season cabbage in every sense of the word: has a reputation for heading uniformity. Its exceptional vigorousness will produce a head under the most adverse conditions. Considered one of the best sorts for Kraut. The heads are very large, nearly round, extremely hard and solid. They are small ribbed and even; if planted very late will keep well and are much to be preferred to the big ribbed winter sorts. Pkt. 10c, oz. 40c, ¼-lb. \$1.35, lb. \$4.00.



BRUSSELS SPROUTS

WONG BOK—(Chinese Cabbage)—Culture—Grow it as you do lettuce; transplant 10 inches apart in rows 12 inches apart.

Boiled with beef or pork it is excellent, having a much more pleasing flavor than cabbage. The inner leaves make better cold-slaw. Pkt. 10c, oz. 50c, ¼-lb. \$1.50, ½-lb. \$2.50, lb. \$5.00. Postpaid.

EARLY WINNIGSTADT—The heads are of the same size as the Jersey Wakefield, but more sharply pointed and not so early. The leaves are rich dark green, slightly glossy, most tightly folded, the heads being the hardest of any early Cabbage. By reason of its great solidity it is a popular variety also to plant in the summer for winter use or cutting for Kraut. Pkt. 10c, oz. 35c, ¼-lb. \$1.35, lb. \$4.00.

COPENHAGEN MARKET—The new Danish cabbage and the earliest ball-shaped variety; two weeks later than the Early Jersey Wakefield. The heads are solid, of fine quality, with small cores and weighing about 10 pounds each. Pkt. 10c, oz. 50c, ¼-lb. \$1.65, lb. \$5.00.

CARROTS

Carrots, to grow in perfection, require a rich, deep, sandy loam, well pulverized and deeply cultivated. For an early crop sow in March and April in drills about 1 foot apart, thinning out to 4 inches in the row; sow for main crop in August and September. The large, late varieties for field culture

should be sown in drills 3 to 3½ feet apart, so as to cultivate by horse. An important point in sowing Carrots, as in all other seeds, is to tread the row firmly after sowing. One ounce will sow over 100 feet of drill; 3 to 4 pounds for one acre.

DANVER'S HALF LONG CARROT

Highly Prized for All Uses

The virtual dependence placed in this Carrot throughout the states naturally makes Danver's Half Long one of the leading varieties. Its reputation as a reliable quality carrot is universal.

A splendid semi-stump-rooted Carrot of rich orange shade and most excellent flavor. Much sought, and always sells at good prices in all markets. Grown mostly on account of their great productiveness and adaptability to all soils. Pkt. 10c, oz. 20c, ¼-lb. 40c, lb. \$1.25.

	Pkt.	Oz.	¼-lb.	Lb.
French Forcing, tender and sweet.....	.10	.20	.40	\$1.50
Danvers' Half Long, one of the best for table use .....	.10	.20	.35	1.25
Cxheart, a good market garden sort .....	.10	.20	.35	1.25
Early Scarlet Horn, very early, and sweet .....	.10	.20	.40	1.25
Chantenay, half long, stump root.....	.10	.20	.35	1.00
Long Orange Improved .....	.10	.20	.35	1.00
Large White Belgian .....	.10	.20	.35	1.00

CELERY

Sow the seed in open ground as soon as fit to work in April, or for very early use in hot bed or cold frame. Cover very lightly. Rolling or pressing in the seed has been found more satisfactory than covering. Cut the tops off once or twice before planting out, to make them stocky. When the plants are five or six inches high, transplant the dwarf varieties three feet, and the taller sorts four or five feet between the rows. Plant six inches apart in rows. Cultivate well, and when large enough, blanch by earthing up. One ounce to 5,000 plants. About ½-pound per acre.

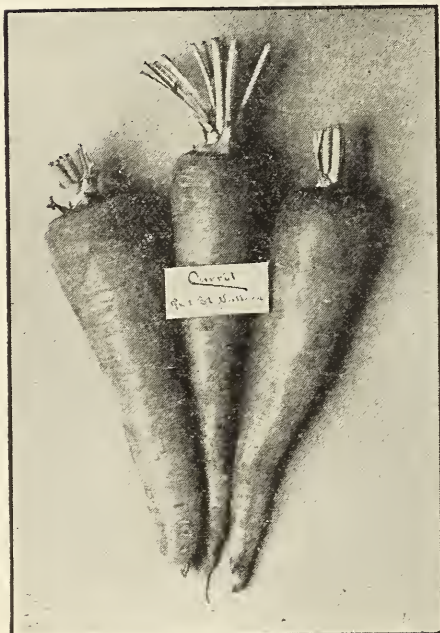
	Pkt.	Oz.	¼-lb.	Lb.
Improved White Plume, very early, solid and crisp.....	.10	.35	\$1.20	\$3.50
Golden Self Blanching, our finest variety. (See illustration next page.)				
Giant Pascal, fine keeper, large late sort .....	.10	.35	1.10	3.50
Dwarf Golden Heart, solid and fine flavored, golden yellow heart.....	.10	.35	1.20	3.50



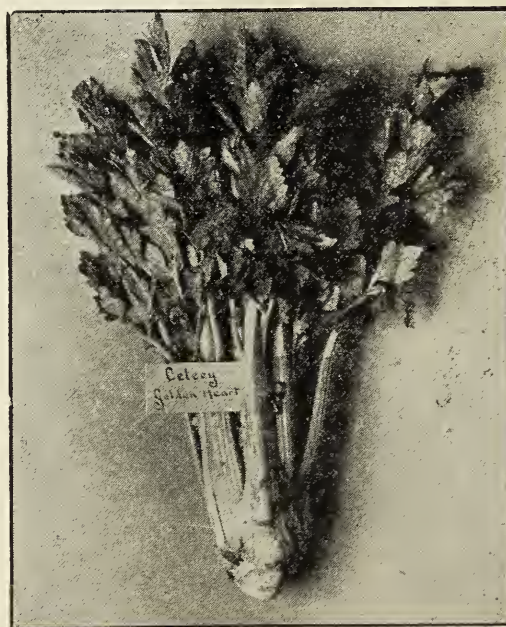
CARROT—DANVER'S HALF LONG

ST. VALERY CARROT

This is a variety of the largest size. The roots are uniform in size and form, smooth, and free from small rootlets, penetrating the soil very deeply. Of gradually tapering shape, holding thickness well throughout the length; rich, deep orange coloring. It is a good keeper, of fine quality for winter use, and extensively grown for stock feeding. Pkt. 10c, oz. 20c, ¼-lb. 35c, lb. \$1.25.



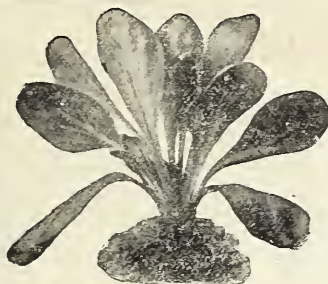
CARROTS—ST. VALERY



GOLDEN HEART CELERY

CELERY (Cont'd.)

CELERIAC **Or Turnip-Rooted** **Celery**



CORN SALAD

Sow seed same as Celery, transplant into rows 2 feet apart and about 6 to 8 inches in the row. No earthing up is required for Celeriac, as it is the roots which are the edible portion of the vegetable. For winter use, pack in damp sand or earth in cellar, or cover with straw and earth inside.

	Pkt.	Oz.	¼-lb.	Lb.
Celeriac or Turnip-Rooted Celery,				
best of its kind.....	\$.10	\$.35	\$ 1.20	\$ 3.50

One of the Foremost Varieties in the World



GOLDEN SELF BLANCHING CELERY

Its close habit, compact growth and straight, vigorous stalks are indescribable. The ribs are thick, broad, fleshy and the hearts large and solid. As the plants mature the inner stems and leaves turn a beautiful golden yellow. They require to be earthed or boarded up for a short time only.

It is a vigorous dwarf grower and quite early; easy to cultivate and of handsome waxy yellow color. Its superb quality, entire freedom from stringiness, its crispness and tenderness and its delightful, rich, nutty flavor make this variety the leading celery in many markets. French grown. Genuine imported French Seed. Pkt. 15c; oz. \$1.50, ¼-lb. \$5.00, lb. \$15.00.

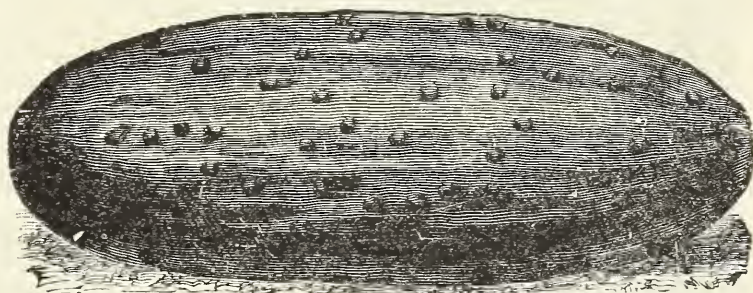
CORN SALAD OR FETTICUS

A salad plant used as a substitute for lettuce in salads, or may be cooked like spinach for greens. It does well in winter and spring. On rich soil the leaves grow quickly and are exceedingly tender. Sow during August and September in drills ¼-inch deep and 6 inches apart. Tread it lightly to insure germination.

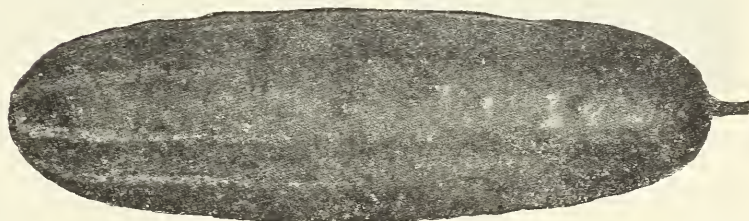
	Pkt.	Oz.	¼-lb.	Lb.
Corn Salad, a most refreshing salad	\$.10	\$.30	\$ 1.00	\$ 3.00

CUCUMBERS

One ounce will plant 100 hills; two pounds will plant 1 acre. Cucumbers succeed best in a rich, loamy soil. If wanted very early, sow in hotbeds, in berry boxes, or small flower-pots 6 weeks before they can be set out in open ground. When danger of frost is over, transplant in hills 4 feet apart each way. For general crop, plant in May, about 6 or 8 seeds in a hill. Leave 4 of the strongest plants to each hill, but do not thin out until plants are strong enough to resist the attack of insects. To protect the vines from bugs sprinkle with Slug-Shot, the best insecticide we know of.



IMPROVED CHICAGO PICKLING—Used almost exclusively by the factories about Chicago. It is of medium length, pointed at both ends; color deep green; begins to set its fruit when the vines are quite young. Also valuable for slicing, fine flavor; never overgrown and seedy. This is our famous canners' pickling variety. Pkt. 10c, oz. 20c, ¼-lb. 50c, lb. \$1.50.



ARLINGTON SELECT WHITE SPINE—This is our best White Spine Cucumber. It is an extra select strain. Almost cylindrical in shape; slightly pointed at the ends—see illustration above; very productive, fruits dark green in color and very uniform in shape. Most excellent for slicing and the best variety for both home garden and market. Market gardeners' choice. Pkt. 10c, oz. 20c, ¼-lb. 50c, lb. \$1.50.

	Pkt.	Oz.	¼-lb.	Lb.
Lemon Cucumber, tender and sweet flavor	\$.10	\$.25	\$.85	\$ 2.50
Rollison's Telegraph, an English frame variety	25 seeds	25c		
Cumberland Pickling, a splendid sort .....	.10	.20	.50	1.50
Improved Long Green, very vigorous and productive.....	.10	.20	.65	2.00
Everbearing, bounteous producer....	.10	.20	.60	1.75
Early Frame, a good pickle variety .....	.10	.20	.50	1.50
Japanese Climbing .....	.10	.25		

SWEET CORN

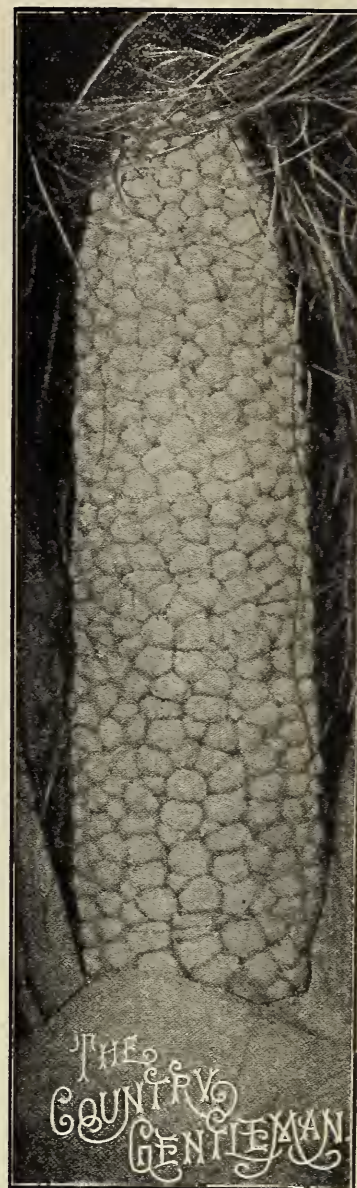
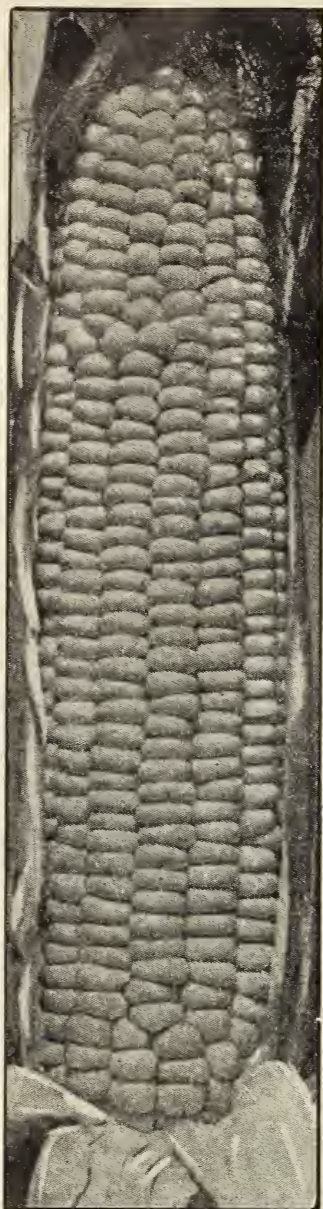
The Sweet or Sugar Corn varieties being liable to rot in cold or wet ground, should not be planted until May, or when the soil has become warm and dry. For a full supply for the table during the entire season plant every ten days or two weeks until the last week in July, in hills 2x3 feet apart for the early kinds, 3x3 feet for the large, late sorts. Some plant in rows 3½ feet apart and 8 inches apart in the rows. Give frequent and thorough cultivation all the season.

	Pkt.	Lb.
Golden Cream, tender and delicious.....	.15	\$.40
Country Gentleman, late variety.....	.15	.40
Alameda Sugar, main crop.....	.15	.40
Early Minnesota, large early variety.....	.15	.40
Stowell's Evergreen, late, fine sort.....	.15	.40
Black Mexican, grains bluish purple.....	.15	.40

10 lbs. any above varieties, \$3.50. Postpaid.

HOWLING MOB—Originated with C. D. Keller, of Toledo, Ohio. In developing this Corn the originator aimed to secure a large ear early in the season, and at the same time possessing the sweet flavor of the later varieties. The stalks are of strong, vigorous growth, four and one-half to five feet in height, have abundant foliage, and generally produce two fine ears to a stalk. The ears measure seven to nine inches in length with twelve or fourteen rows of good-sized, pearly white grains. The ears are covered with a heavy husk which extends well out from the tip and affords good protection from the green worms which are so often destructive to early Sweet Corn. Pkt. 15c, lb. 40c, 10 lbs. \$3.50. Postpaid.

GOLDEN BANTAM—Golden Bantam is unquestionably the sweetest, the richest, the most deliciously flavored corn in the world. Its flavor is exquisite, it's superb, it's glorious, it's magnificent. Its extreme hardness permits planting earlier and in colder and damper soil than other varieties. Many of our customers are planting it at regular intervals to obtain a continuous supply during the season, and in our latitude it can be sown as late as the middle of July and will furnish corn for the table before frost. The stalks grow from 3½ to 4 feet in height and produce 2 and more good ears, which are 6 to 7 inches long and of a bright golden yellow color when ready for the table. It has to be tasted to be appreciated. It is the sweetest, most luscious, honeyed, sugary and toothsome corn produced on earth. Market gardeners will find Golden Bantam a well paying crop throughout the season. Our strain is a decidedly superior one. Pkt. 15c, lb. 40c, 10 lbs. \$3.50. Postpaid. Field Corn. See page 26.



CHERVIL

Can be planted any time in the early spring. The leaves should be kept cut, and if not allowed to run to seed, will keep green for a long time. Is more finely curled and handsome than Parsley, and makes an excellent plant for garnishing.

	Pkt.	Oz.	¼-lb.
Chervil, double curled sweet parsley.....	\$.10	\$.45	\$1.25

CRESS OR PEPPER GRASS

Extensively used as a small salad; very useful and healthful. Can be used alone or mixed with other salads, for which it is highly esteemed; also useful for garnishing. Sow thickly in shallow drills about a foot apart; repeat at intervals.

	Pkt.	Oz.	¼-lb.
Cress, Curled Upland.....	\$.10	\$.20	\$.50

COLLARDS

A plant bearing a large mass of leaves on the top of a stout stalk. It is a species of cabbage, and the flavor is the same. It bears leaves all through the winter, and is used especially in the South for cabbage greens. Young plants may be started in boxes in early spring, and the young plants transplanted, allowing plenty of room for each plant.

	Pkt.	Oz.
Collards	\$.10	\$.20

CHICORY

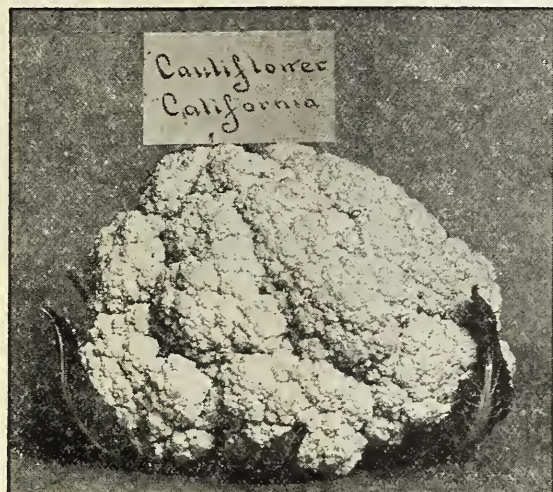
Used as substitute for coffee when the roots are dried and ground. The roots are also used for cooking, and are very palatable. Sow early in the spring, thin the young plants to six inches, and keep well hoed. The plant spreads from the root and is perennial.

	Pkt.	Oz.	¼-lb.	Lb.
Chicory, large rooted Magdeburg.....	\$.10	\$.40	\$1.35	\$4.00

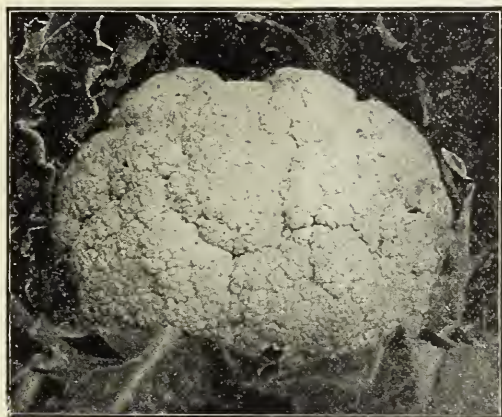
CAULIFLOWER

Culture same as Cabbage. Soil must be rich and deep, and the plants liberally supplied with water in dry weather. As the flower heads appear, the large leaves should be broken down over them to defend them from the sun and rain. One ounce will produce 3,000 plants.

	Pkt.	Oz.
Extra Early Dwarf Erfurt, good market variety	\$.25	\$4.00
Autumn Giant, very large, late	.10	1.50



CALIFORNIA CAULIFLOWER—One of the finest late varieties. Heads large, compact and thoroughly protected by the leaves. Pkt. 10c. ¼-oz. 40c, oz. \$1.50, ¼-lb. \$4.50, lb. \$12.00.

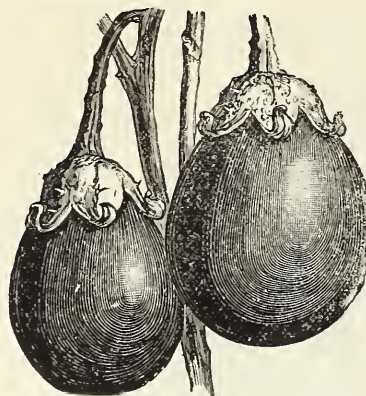


SNOWBALL

IMPROVED EARLY SNOWBALL—We know of no better type of this variety—very early, smooth, rounded heads (see illustration above), fine grained, compact and even in size. The Snowball is now the standard variety the country over. Good for either home use or market. Pkt. 25c, ¼-oz. \$1.15, oz. \$4.25, ¼-lb. \$12.00.

EGG PLANT

One ounce will produce 2,000 plants. A strong, uniform heat is required to germinate the seeds, and a thoroughly pulverized, well-enriched, warm soil is necessary to perfect the fruit. Transplant to 3 feet apart each way, and when about a foot high, support the plants by drawing the earth up around them.



	Pkt.	Oz.	¼-lb.	Lb.
Egg Plant, Black Beauty	..\$.10.	\$.75	\$2.50	\$7.50
Egg Plant, New York Improved	.....	.10	.75	2.50 7.50
HORSE RADISH SETS—Ready in January,				
doz.				\$.50

WATERCRESS

This is sown by the side of running water. It is altogether an aquatic plant and forms an early and wholesome spring salad.

	Pkt.	Oz.
Cress, Sweet Water	\$.10 \$.60

SEEDS OF POT, SWEET AND MEDICINAL HERBS

	Pkt.		Pkt.
Sweet Basil	.....\$ .10	Dill	.....\$ .10
Borage	......10	Lavender	......10
Caraway	......10	Majoram Sweet	......10
Catnip	......10	Rosemary	......10
Coriander	......10	Sage	......10
Fennel	......10	Savory	......10
Horehound	......10	Thyme, French	......10

ENDIVE

One ounce will sow 150 feet of drill. Sow in any ordinary dry soil in drills 1 foot apart, covering lightly. When the plants are about 2 inches high, thin to about 12 inches in the row. When the plants have attained full size, gather up the leaves, tying together at the tips. This excludes the air from the inner leaves, which in the course of three or four weeks will become beautifully blanched.

	Pkt.	Oz.	¼-lb.
Endive	\$.10	\$.20 \$.65

KOHL RABI Turnip-Rooted Cabbage

One ounce will produce 2,500 plants. Sow in rows 18 inches apart, afterwards thinning to 8 or 10 inches. When young, Kohl Rabi is a delicate and palatable vegetable, and is very popular in Germany and other countries of Europe, where it is more generally used than in America.

	Pkt.	Oz.	¼-lb.	Lb.
Kohl Rabi, Early White Vienna	.....\$ .10	\$.35	\$1.00	\$3.00
Kohl Rabi, Early White Vienna	.....\$ .10	\$.30	\$1.00	\$3.00



KOHL RABI

KALE OR BORECOLE

This plant is useful for furnishing a large supply of greens for boiling during the early fall, winter, and spring months. Seed should be sown thinly in drills, transplanting to rows three feet apart when of sufficient size.

	Pkt.	Oz.	¼-lb.	Lb.
Kale, dwarf, green curled.....	.10	.20	.65	\$2.00
Kale, tall green Scotch.....	.10	.20	.65	2.00
Kale, Jersey, fine for chickens.....	.10	.20	.45	1.25
Giant Marrow.....	.10	.50	1.65	5.00



TALL SCOTCH KALE

LEEK



Sow early in April, in drills 1 foot apart and 1 inch deep. When the plants are 6 to 8 inches high, transplant in a deep, rich soil, in rows, 12 inches apart and 6 inches in the rows, as deep as possible, so that the neck may be covered and blanched; draw the earth to them as they grow. The seed may also be sown in August or September; plants transplanted in the spring.

	Pkt.	Oz.	¼-lb.	Lb.
Leek, American Flag.....	.10	.35	\$1.15	\$3.50
Leek, Large Rouen.....	.10	.35	1.15	3.50

LETTUCE

We Carry All the Leading and Best Varieties



MAY KING

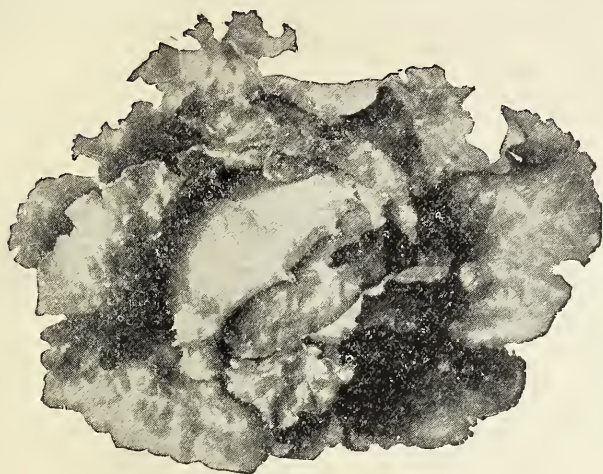
Lettuce seed should be covered very shallow to secure germination, especially the black seeded, if sown under glass or in the house. For early spring use, sow in September and protect through the winter in cold frames, the same as cabbages, or sow in hot beds in March and transplant to open ground as soon as it can be worked. For late supplies sow in open ground as soon as the season will permit, in rows one foot apart; thin out plants one foot apart in rows. If sown every two or three weeks to the middle of August, it may be had in perfection the entire season. One ounce will sow 125 feet of drill and produce 3,000 plants.

	Pkt.	Oz.	¼-lb.	Lb.
California Cream Butter.....	.10	.20	.50	\$1.50
Romaine or Cos .....	.10	.20	.60	1.75
Prize Head.....	.10	.20	.50	1.50
Deacon, large head.....	.10	.25	.65	2.00
Passion, old favorite .....	.10	.20	.65	2.00
Hanson Improved.....	.10	.20	.50	1.50



LOS ANGELES OR NEW YORK

LOS ANGELES OR NEW YORK—A large, crisp, tight-heading lettuce which is a great favorite in the markets of Los Angeles and San Francisco. This is a lettuce much raised around New York whence its name was taken. The quality is the finest and is an excellent lettuce for the garden. The chances are ten to one that those fine little sweet heads of lettuce you buy in the San Francisco markets are Los Angeles variety. We sell hundreds of pounds of this to the market gardeners. Pkt. 10c, oz. 50c, ¼-lb. \$1.50, lb. \$5.00.

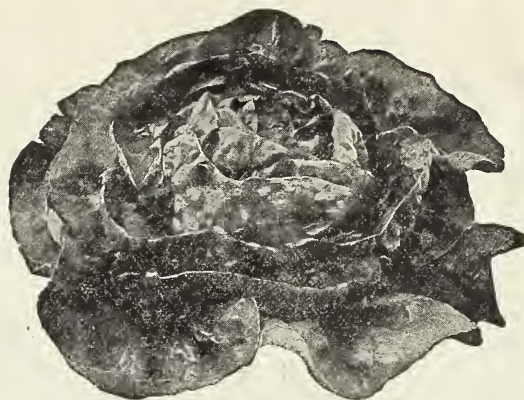


ICEBERG

ICEBERG LETTUCE—This makes large heads of pleasing appearance and retains its crispness and mild flavor to a greater degree during the hot summer months than any other crisp-head variety. The plants attain a diameter of twelve inches, with good cultivation. The leaves are of a soft bright green, growing closely around the head. Pkt. 10c, oz. 25c, ¼-lb. 85c, lb. \$2.50.

MAY KING—The best early-heading variety. The inner leaves are tightly folded (see illustration above), of good

substance and a rich yellow color. It is hardy, early and a quick grower. Pkt. 10c, oz. 20c, ¼-lb. 60c, lb. \$1.75.



BIG BOSTON

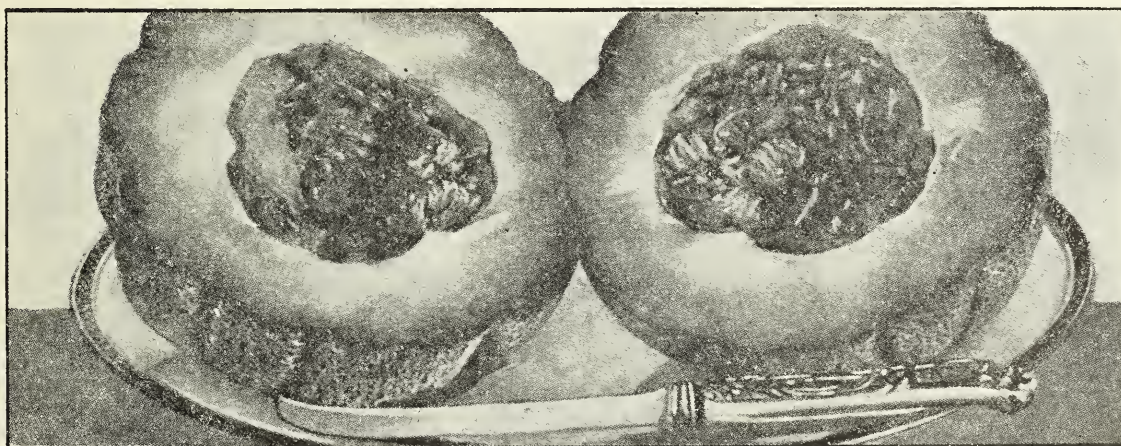
BIG BOSTON LETTUCE—This is a fine forcing variety for cold-frames during the winter months, as it produces heads of very large size, often ten to twelve inches across, and succeeds better in a cooler temperature than do most forcing strains. The large heads are beautifully blanchd and of superior quality. It heads well also in the open ground during cool weather of spring and fall, and is very popular in the South to grow for shipping North. Our seed is the choicest it is possible to produce. Pkt. 10c, oz. 25c, ¼-lb. 75c, lb. \$2.50.

MUSKMELON

Leading Sorts

One ounce will plant 80 hills; 2 pounds will plant an acre. A light, warm, rich soil is essential for this crop. Plant in hills 6 feet apart each way, using 6 to 8 seeds in the hill. After all danger of destruction by bugs is over, thin out to 3 plants to a hill; when about 1 foot long, pinch off the tips to make them branch. This strengthens the growth of the vines and makes the fruit mature early. To protect the vines from bugs, sprinkle with Slug-Shot, the best insecticide we know of.

Breeders' Association began a systematic effort to develop a salmon-fleshed melon that would meet every requirement of their needs, and Salmon-Tint No. 10-25 is the result of their efforts. This is an early melon of the solid netted type that is so very desirable. Very small seed cavity, with thick, luscious flesh of genuine salmon tint shading to green near the rind. A splendid keeper that stands shipping and always arrives in the best possible condition. It has been alike successful in the East, in the West, and in the South. It is a prolific yielder and is pronounced by every one who has used it the ultimate in salmon-fleshed melons. We consider it one of the best yellow-fleshed melons that we have ever offered. Pkt. 10c, oz. 25c, ¼-lb. 85c, lb. \$2.50.



SALMON-TINT POLLOCK 10-25—In the famous Rocky Ford Melon district the Salmon-Tint Pollock has come to be recognized as perhaps the most desirable salmon-fleshed melon for shipping. It is said to be absolutely rust resistant, and the factor of rust has been the one disturbing element in this great melon-growing section. Some years ago The Rocky Ford Cantaloupe Seed

	Pkt.	Oz.	¼-lb.	Lb.
Paul Rose.....	.10	\$.20	\$.60	\$1.75
Montreal Market Nutmeg.....	.10	.20	.60	1.75
Extra Early Hackensack.....	.10	.20	.50	1.50
Burrel's Gem.....	.10	.20	.50	1.50
Casaba, Golden Beauty.....	.10	.25	.85	2.50
Persian Melon.....	.10	.60	2.00	6.00

MELON GROWERS—WRITE US FOR PRICES ON LARGE QUANTITIES—ANY VARIETY



MUSKMELON

ROCKYFORD MUSKMELON

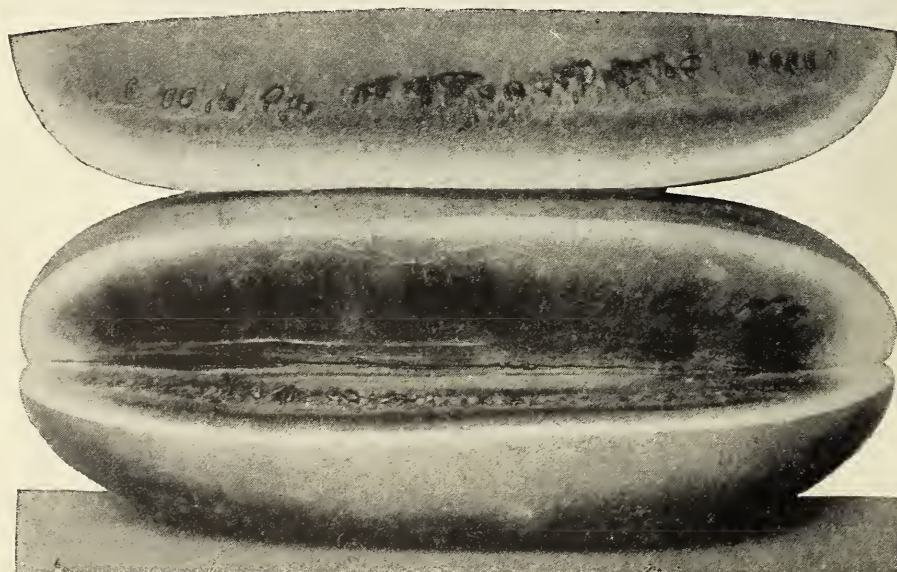
The Melon That Put Colorado On the Map

When you hear Rockyford you immediately think Muskmelon. It is undoubtedly the best known Muskmelon in the world. So popular in fact that its very name has become synonymous with High Quality when applied to Melons.

Our Selected Strain is of such a highly developed character as to be a rejuvenated Rockyford with its virtues greatly intensified.

The flesh of these melons is green, lusciously sweet and melting; it can be eaten close to the rind. The seed cavity is extremely small. The average weight of the melon is about one and one-half pounds, and the largest per cent of the crop is of such size as to pack 45 melons to the standard crate, 12x12x24 inches. The netting is extremely well developed, closely laced, of gray color, covering the entire fruit. Pkt. 10c, oz. 20c, ¼-lb. 50c, lb. \$1.50.

GOLD LINED ROCKY FORD—A new melon from Rocky Ford, Colorado; of a fine uniform shape and without ribs; slightly oval; meat thick, green, and light-gold toward center. We recommend this as an extra fine



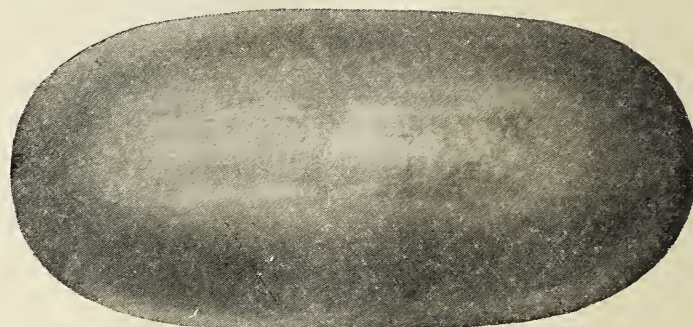
KLECKLEY SWEETS

melon in flavor and in every way. See front catalogue, cover illustration. Selected stock. Pkt. 10c, oz. 25c, ¼-lb. 75c, lb. \$2.25.
Postage paid to 4th zone.

WATERMELONS

One ounce will plant 30 hills; 4 pounds will plant an acre. The culture of watermelons differs from that of muskmelons mainly in that the hills should be wider apart, from 8 to 10 feet, according to the variety grown. An effort should be made to secure good, strong vines early in the season, and this can best be done by taking care that the hills are large, mellow, and well drained, with the manure placed so that they will not dry out quickly under hot suns. Plant the seeds thickly, and thin the plants to 4 of the strongest in each hill. All possible protection from insects should be given the young plants, and their growth may be still further hastened by frequent applications of liquid manure. As a protection from insects, netting is frequently used, and also Slug-Shot dusted over the leaves when wet.

	Pkt.	Oz.	¼-lb.	Lb.
Halbert Honey	.10	\$.15	\$.45	\$1.25
Angeleno	.10	.15	.55	1.50
Chilian	.10	.15	.50	1.50
Georgia Rattlesnake	.10	.15	.40	1.25
Black Boulder	.10	.15	.45	1.25
Dixie	.10	.15	.45	1.25
Florida Favorite	.10	.15	.45	1.25
Cuban Queen	.10	.15	.45	1.25



TOM WATSON

TOM WATSON—In the South there are two classes of Watermelons—first, a thin rind table melon; second, a tough rind shipping melon. Tom Watson belongs to the latter class, and has proved, wherever shipped, to be a good eating melon—in fact, superior to any other of its class. On the light lands in Florida they produce Tom Watson Watermelons that are really delicious in flavor. The melons measure eighteen to twenty-four inches long by ten to twelve inches in diameter and weigh from fifty to sixty pounds. The dark-green rind is tough but thin, and easily withstands shipment to far-distant markets. The deep-red flesh extends to within three-quarters of an inch of the green rind—heart is large with no sign of core. The seeds are brown tipped with white. Pkt. 10c, oz. 20c, ¼-lb. 50c, lb. \$1.50.

KLECKLEY SWEETS—(Or Monte Cristo)—A very desirable variety for the home garden or nearby markets. Fruit medium sized oval, and skin dark green; flesh bright red and very sweet. Skin is brittle. It is the very sweet, honey-like flavor that makes it especially distinct from all other varieties. Pkt. 10c, oz. 20c, ¼-lb. 45c, lb. \$1.25.

ONIONS

The best onions are grown on low, sandy, or mucky lands, with natural moisture, and **plenty of it**. Higher lands can be used if irrigated, providing the land is rich and very well worked before planting the seed. Onions do not follow a hay or grain crop to good advantage, since the soil lacks nitrogen and humus. A piece of land contemplated for onions should be planted to beans, peas, or some other vegetable crop one or two years.

On high lands the seed should be sown in December or early in January, while on low lands any time from February 1st to March 10th will do, depending on the condition of the weather. Sow in rows from twelve to sixteen inches apart, using four to five pounds of seed. In irrigating onions, it is important that the land never be allowed to get dry, for a check in the growth will either force the plant to run to seed or will make stiff necks. In the house garden, plant early in drills, using one ounce to 250 feet of row.

We pay postage to 4th zone.



DANVER'S YELLOW GLOBE

Danver's Yellow Globe — Conspicuous, large, golden yellow spheres, of exceptional beauty; a late, large, main crop variety; best keeping quality. The buyer of a packet and the planter for carload shipments are equally enthusiastic over this gem among onions. Sacked or barreled for market. Its size, beauty, quality and fine appearance make it a trade winner. Pkt. 10c, oz. 25c, ¼-lb. 85c, lb. \$2.50.



RED WETHERSFIELD

LARGE RED WETHERSFIELD ONION—This is the standard and favorite variety. Large size, deep, purplish white, stronger flavored than larger varieties. Very productive and an excellent keeper. Pkt. 10c, oz. 25c, ¼-lb. 85c, lb. \$2.50.



PRIZE TAKER

PRIZE TAKER—A very large globe-shaped variety, with light-yellow skin and white flesh of mild flavor. It is a heavy cropper and a fairly good keeping onion, and often weigh two or three pounds. Pkt. 10c, oz. 25c, ¼-lb. 85c, lb. \$2.50.

	Pkt.	Oz.	¼-lb.	Lb.
Australian Brown , long keeper.....	.10	\$.20	\$.60	\$1.75
White Bermuda .....	.10	.50	1.25	
White Queen , fine for pickling.....	.10	.40	1.35	4.00
California Red , very mild and early ..	.10	.20	.65	2.00
White Portugal or Silverskin.....	.10	.30	1.00	3.00

ONION SETS

For sets, sow the seeds as early as possible in the spring, very thickly in drills. As soon as the tops die off in summer remove them to a dry, airy place, and early in the following spring replant by placing the sets in shallow drills, 12 inches apart, and about 4 inches apart in the drills; the onions, by this process, are obtained of a large size early in the season.

Pound, postpaid.....\$.25

OKRA

This vegetable is extensively grown for its green pods, which are used in soups, stews, etc., to which they impart a rich flavor, and are considered nutritious. Sow the seed thickly in rich ground about the middle of May, or when the ground has become warm, in drills 3 feet apart, 1 inch deep; thin to 10 inches apart in drills.

	Pkt.	Oz.	¼-lb.
Improved Dwarf Green.....	.10	\$.20	\$.45
White Velvet.....	.10	.20	.45

MUSHROOMS

How to Grow Them

Send for our printed leaflet giving full cultural directions. **FREE.** Pure Culture Spawn, 35c per brick.

PEAS

A light, dry soil, not over rich, suits the Pea. If they grow too vigorously and show no signs of bloom, run a spade along about 8 inches from the row straight down, and thereby root prune them. Do this each side the row, and they will bloom in a few days. Plant as early as the ground can be worked, and again every two weeks for succession throughout the season. Plant single or double rows from 4 to 6 feet apart, according to the different heights, about an inch apart in the row, and 3 inches deep; hoe often. In dry weather, Peas should be soaked in soft water 5 or 6 hours before planting, and if the ground is very dry they should be watered in rows.



SHARP'S STANDARD

SHARP'S STANDARD—An extremely prolific and most thoroughbred second-early of superb quality. The magnificent dark-green pods, borne in pairs, are five to six inches long, containing nine and ten large peas which are rich in flavor. The vines are strong; the pods are large, and come absolutely true to type. Pkt. 15c, 1b. 40c, 10 lbs. \$3.50.

LAXTONIAN PEAS—The largest podded, early dwarf pea. Requires no supports of any kind. The vines are very productive and produce pods similar in shape to the Gradus, which are filled with large, luscious, light-green peas. Pkt. 15c, 1b. 40c, 10 lbs. \$3.50.

PEAS—EARLY DWARF VARIETIES

	Pkt.	Lb.
Little Marvel	\$.15	\$.35
Cartér's Daisy .....	.15	.35
Little Gem .....	.15	.35
American Wonder .....	.15	.35

PEAS—SECOND EARLY MEDIUM DWARF

Alameda Sugar .....	.15	.35
Stratagem .....	.15	.35

PEAS—TALL EARLY VARIETIES

Alaska or Earliest of All	\$.15	\$.35
Thomas Laxton .....	.15	.35

PEAS—TALL LATE VARIETIES

Telephone	\$.15	\$.35
Champion of England .....	.15	.35
Tall Edible, Pod .....	.15	.40

SENATOR PEAS—The Senator is a new second-early. It is a large, luscious wrinkled pea; of the same season as McLean's Advancer, but with larger pods and vines much more productive. The pods are well filled with peas, sweet and tender, even when quite large; vines 2 feet high. Pkt. 15c, 1b. 40c, 10 lbs. \$3.50.

IMPROVED STRATAGEM PEAS—2 feet. Vines of strong growth with large foliage; do not need any support. Pods of large size, well filled with large, dark green peas of rich, sweet flavor. One of the very finest. Pkt. 15c, 1b. 40c, 10 lbs. \$3.50.

PARSNIPS

One ounce will sow 200 feet of drill; 5 pounds will plant an acre. This crop requires a very rich soil. Sow in drills 18 inches apart and ½-inch deep, and thin to 8 inches in a row. Besides being desirable as a table vegetable, they are valuable for feeding stock.

	Pkt.	Oz.	¼-lb.	Lb.
Hollow Crown, best and most popular sort	\$.10	\$.20	\$.50	\$ 1.50

PARSLEY



PARSLEY

Used for garnishing and seasoning soups, meats, etc. Succeeds best in a mellow, rich soil. Sow thickly early in April in rows 1 foot apart and ½-inch deep; thin out the plants to stand 6 inches apart in the rows. The seed is slow of germination, taking from three to four weeks to make its appearance, and often failing to come up in dry weather. To assist its coming up quicker, soak the seed a few hours in warm water, or sprout in damp earth, and sow when it swells or bursts. For winter use protect in a frame or light cellar.

	Pkt.	Oz.	¼-lb.
California Moss Curled	\$.10	\$.20	\$.45
Plain or Single Parsley .....	.10	.20	.45

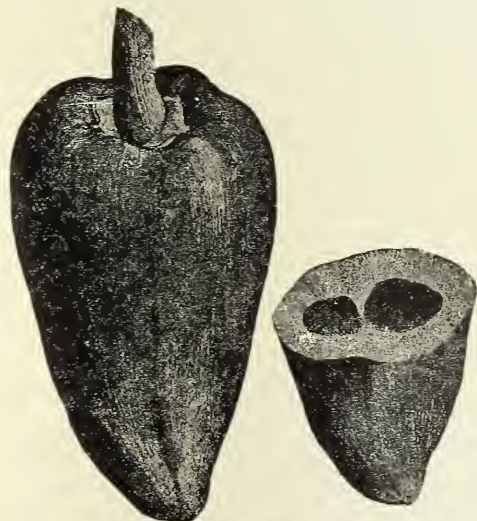
PEPPERS



RUBY KING PEPPERS

Peppers are indispensable as a seasoning for soups and meats. The large varieties are mainly used for this purpose and pickling. The mild, sweet varieties, like Golden Dawn and Ruby King, are used for Mangoes, while the small-fruited sorts are the best for sauces. Sow in hotbeds in February or March, or in a warm, sheltered border in May and, when the season is favorable, transplant in rows 2 feet apart and 18 inches in row, in good, rich ground.

	Pkt.	Oz.	¼-lb.	Lb.
Pimiento, mild, thick flesh.....	\$.10	\$.75	\$2.60	\$7.50
Anaheim Chili, grows 6 to 8 inches long .....	.10	.50	1.65	5.00
Large Bell.....	.10	.75	2.85	8.00
Chinese Giant.....	.10	.80	2.70	8.00
Cayenne, long red.....	.10	.80	2.70	8.00
Ruby King.....	.10	.50	1.60	5.00
Sweet Mountain.....	.10	.70	2.35	7.00
Red Chili.....	.10	.80	2.70	8.00



PIMIENTO PEPPERS

PIMIENTO PEPPERS—The quality of our pimiento pepper seed was so far superior to anything heretofore offered that the canneries were astounded at the size, quantity, and mildness of the exceedingly fine quality of fruits produced. It pays to know where to buy good seed.

POTATOES
(Oregon Grown)

The soil best suited to the Potato is a rich, sandy loam, but it seems to thrive in almost any soil or climate. The Potato, being a gross feeder, requires a liberal application of manure; if stable manure is to be used, it should be well rotted, and not allowed to come in contact with the tubers. On no other crop are the results from the use of the phosphates so mani-



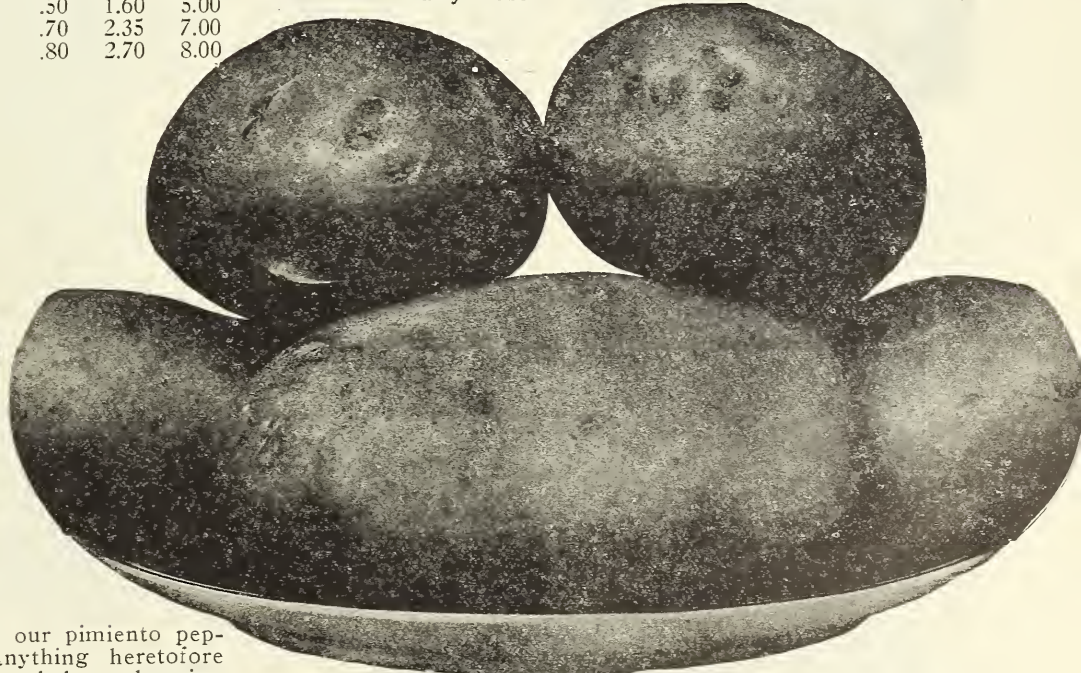
SEED POTATOES

fest as on the Potato; almost invariably the tubers are smoother, brighter and freer from rust and the destructive influences of wire worms. The best fertilizers are super-phosphate of lime and bone dust. Potato scab can be entirely prevented by using flour of sulphur in the rows with the phosphate. Use at the rate of 100 to 150 pounds to the acre. Plant as early in the spring as the ground can be thoroughly worked, in rows 3 feet apart and 1 foot in the rows; covering in light, warm soil about 4 inches, and in cold, wet ground 3 inches deep; draw the earth to the plants as they advance in growth.

We offer the following varieties; write for prices on larger quantities:

Garnet Chili
Netted Gem
Burbank
White Rose
Uncle Sam
Early Rose

British Queen
Peerless
American Wonder
Gold Coin
Netted Burbank
Idaho Netted Gem



THE BURBANK

PUMPKIN

One ounce will plant 40 hills; 5 pounds will plant an acre. Plant in hills 8 feet apart each way, allowing 3 strong plants to a hill. In other respects they are cultivated as melons and cucumbers; keep separate from melons and cucumbers, as they are liable to mix.

	Pkt.	Oz.	¼-lb.	Lb.
Large Field or Big Tom.....	\$.10	\$.20	\$.45	\$1.25
Golden Cushaw.....	.10	.20	.50	1.50
Large Cheese.....	.10	.20	.35	1.00
Mammoth King.....	.10	.20	.60	1.75
Common Field.....	.10	.15	.35	1.00
Golden Oblong.....	.10	.20	.50	1.50

RHUBARB

Sow in drills an inch deep; thin out to six inches apart. In fall, trench a piece of ground and manure it well and then transplant the young plants into it three feet apart each way. Cover with leaves or litter the first winter, and a dressing of manure should be given every fall.

	Pkt.	Oz.	¼-lb.	Lb.
Victoria, standard sort.....	\$.10	\$.20	\$.50	\$1.50
Rhubarb Roots.....	20c each; \$2.00 doz.			

SQUASH

Squashes should be planted in a warm, light, rich soil, after the weather has become settled and warm, about the middle of May or June. Plant in well-manured hills, in the same manner as Cucumbers or Melons—the bush varieties 3 or 4 feet apart each way, and the running kinds from 6 to 8 feet. Eight to ten seeds should be sown in each hill, thinning out after they have attained their rough leaves and danger from bugs is over, leaving three or four of the strongest plants per hill. An occasional feeding of liquid manure will repay in size of fruits.



EARLY WHITE BUSH SCALLOP SQUASH—A very early variety, with flat, creamy white, scalloped squashes, 4 to 6 inches in diameter. The vine is bush in habit and rather dwarf. This variety is the common "patty pan" squash. Pkt. 10c, oz. 20c, ¼-lb. 45c, lb. \$1.25.

	Pkt.	Oz.	¼-lb.	Lb.
Vegetable Marrow.....	\$.10	\$.20	\$.50	\$1.50
Fordhook.....	.10	.20	.60	1.75
Boston Marrow.....	.10	.20	.45	1.25
Summer Crookneck.....	.10	.15	.40	1.25



HUBBARD

SQUASH—ITALIAN MARROW—(Cocozelle Bush)—The very earliest of all the Squashes. Although usually eaten when quite small, still it is good for the table when nearly full grown; has a distinct flavor. The color is dark green at first, but changes to a lighter green as it matures. Pkt. 10c, oz. 20c, ¼-lb. 50c, lb. \$1.50.

TRUE HUBBARD—This is the well-known winter squash, now grown so largely throughout the country. Vines of strong running growth; fruits large olive shape, with dark-green skin and very rich flesh. An excellent keeper and of splendid quality. Our strain is extra fine—see illustration to the right—from photograph. Pkt. 10c, oz. 20c, ¼-lb. 50c, lb. \$1.50.

SPINACH

VICTORIA

Distinguished for its exceedingly dark green color, and also for its very long standing qualities, remaining fit for use from two to three weeks longer than the ordinary "long standing." The leaves are thick, broad, crumpled and of the best quality. Plants are strong and compact growing, furnishing a larger amount of leaves than any other kind outside of Triumph. Pkt. 10c, oz. 20c, ¼-lb. 40c, lb. 75c.

BLOOMSDALE—A great favorite; thick, dark green, wrinkled leaves (see illustration); hardy, of fine substance and flavor. One of the best shipping varieties. Pkt. 10c, ¼-lb. 25c, lb. 75c.

SPINACH—LONG STANDING—The best long season variety—withstands the hot summer weather, without going to seed, better than any other. Leaves large, thick and crumpled, with a fleshy appearance; very desirable. Pkt. 10c, ¼-lb. 30c, lb. 75c.

SPINACH—WINTER PRICKLY—A splendid fall and winter sort, but also well adapted for spring use. Hardy, large plants of vigorous growth with thick and dark green leaves. Pkt. 10c, ¼-lb. 25c, lb. 75c.

SPINACH—MONSTROUS OF VIROFLAY—Very broad leaved, round seeded. Pkt. 10c, ¼-lb. 25c, lb. 75c.

SPINACH—NEW ZEALAND—A plant with thick, fleshy texture and soft crystalline leaves. Is not like the ordinary spinach in appearance, and will stand heat wonderfully. Pkt. 10c, oz. 20c, ¼-lb. 60c, lb. \$2.00.

CANNED SPINACH

Next to the Tomato, there is more Spinach canned in California than any other vegetable. Canned Spinach has now become a standard household necessity as there is no doubt that Canned Spinach is far superior in every way to the fresh article. This industry has doubled itself in the past five years. We distributed over fifty thousand pounds of Spinach Seed this past season to the Canning Industries of California. We especially recommend Winter Prickly, Monstrous of Viroflay, Long Standing, Victoria, as the best varieties for canning.

SALSIFY

Generally known as the Oyster Plant. We esteem this to be a much better root for table use than the Parsnip or Carrot. Some persons have been skeptical as to its possessing an oyster flavor, as it seldom attains true taste until, like the parsnip, it has been well frosted. But if dug up during thaws in the winter and early in the spring and boiled like carrots or parsnips, or half boiled and grated fine, made into balls, dipped into a batter and fried like oysters, it is a very good substitute for the shell-fish itself. Boiled Salsify, Escaloped Salsify, Fried Salsify, and Salsify Soup are delightful dishes.

	Pkt.	Oz.	¼-lb.	Lb.
Mammoth Sandwich Island.....	\$.10	\$.25	\$.75	\$2.50

RADISH

Radishes thrive best in a light, rich, mellow soil, and to bring out their mild qualities they must make a quick and tender growth. Sow for very early use in hot beds during winter and early spring, or later on in sheltered borders, in well-manured, deeply dug, and finely raked soil; if not well stimulated into a rapid growth, they become fibrous and tough; sow in drills 10 inches apart, and thin to 2 inches in the rows. Sow at intervals of two or three weeks until September for succession. Sow winter varieties in July and August; like turnip, they make the best growth in autumn, and must be taken out before severe frost, and stored away in a cool cellar in sand, or a pit, where they will keep tender and crisp all winter; before using, put in cold water, which adds to their freshness.

	Pkt.	Oz.	¼-lb.	Lb.
Early Scarlet Turnip, round red.....	.10	\$.20	\$.50	\$1.50
Half Long Scarlet, very solid.....	.10	.20	.50	1.50
Icicle, long white sort.....	.10	.20	.50	1.50
White Vienna, long and tender.....	.10	.20	.50	1.50
Long Scarlet, very early.....	.10	.20	.50	1.50
Rosy Gem, red, white tip.....	.10	.20	.50	1.50
French Breakfast, half long.....	.10	.20	.50	1.50
California Mammoth White.....	.10	.20	.50	1.50
Round Black Spanish.....	.10	.20	.50	1.50
Long Black Spanish.....	.10	.20	.50	1.50
Crimson Giant.....	.10	.20	.50	1.50

TOMATOES



TOMATOES

For early plants sow in hot beds in February, in drills 5 inches apart and ½-inch deep; when the plants are about 2 inches high, transplant into another hot bed 4 inches apart each way; plant out in the open ground early in May, or as



RADISH—HALF LONG SCARLET

soon as danger from frost is over, 4 feet apart each way in hills, which should have a shovelful of well-rotted manure mixed with the soil. Water freely at time of transplanting; when the first fruit is set, pinch off the ends of the branches to obtain early fruit. Sufficient plants for a small garden can be grown in a shallow box or large flower pot, by placing it in a sunny window in a warm room or kitchen. For late use sow in a sheltered border in May, and set out the plants in July; the green fruit can be picked off before frost and ripened under glass. By training the vines on trellises or tying to stake, the fruit will ripen better and be of finer quality.

	Pkt.	Oz.	¼-lb.	Lb.
Earliana .....	.10	\$.40	\$1.35	\$4.00
Winter Cherry or Husk.....	.10	.75		
Ponderosa .....	.10	.65	2.20	6.50
Golden Queen.....	.10	.50	1.65	5.00
Yellow Pear.....	.10	.75		
Dwarf Champion.....	.10	.50	1.65	5.00

TOMATO—CHALK'S EARLY JEWEL—The largest, smoothest, and finest-flavored extra-early bright-red Tomato! Within a week to ten days as early as Sparks' Earliana, it is even a heavier cropper, with tomatoes of larger size and sweeter flavor, produced continuously throughout the season.

The plants are of strong, robust growth, with ample foliage to protect the fruits from sunscald, and not likely to blight. The bright scarlet fruits are smoothly round, very deep, and solidly meaty, with only a few quite small seed-cells, and of remarkably fine sweet flavor. Pkt. 10c, oz. 40c, ¼-lb. \$1.35, lb. \$4.00.

TOMATO—MATCHLESS—Weil worthy of its name—it is hard to match. It produces large, red fruits throughout the entire season: flesh very solid, heavy and free from any core. If we were to plant but one variety of tomatoes it would be the Matchless. Pkt. 10c, oz. 40c, $\frac{1}{4}$ -lb. \$1.35, lb. \$4.00.

TOMATO—STONE—This variety is very large and of a bright scarlet color; smooth, ripening to the stem without a crack; exceedingly solid; an excellent shipper; quality very best; fine for canning; a good keeper; not

subject to rot; its vines and foliage rank and robust. Pkt. 10c, oz. 40c, $\frac{1}{4}$ -lb. \$1.35, lb. \$4.00.

TOMATO—SAN JOSE CANNER—Smooth, solid, very large fruits, which are nearly round or slightly flattened, and grow very uniform in size and shape. Its fine quality, splendid shape, large size and its great productiveness have made this late variety almost a standard sort of red tomato for main crop use. Pkt. 15c, oz. 75c, $\frac{1}{4}$ -lb. \$2.50, lb. \$7.50.



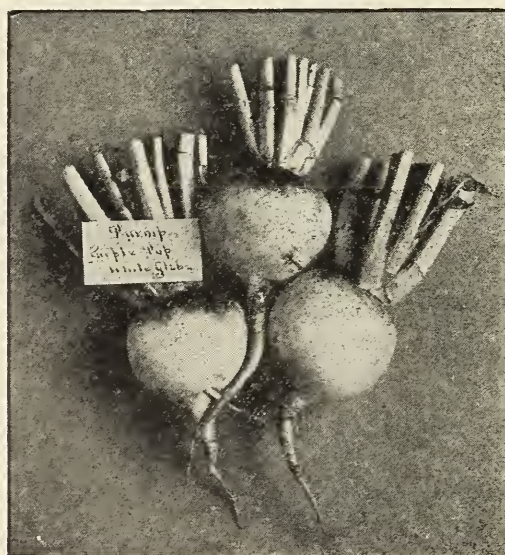
TURNIPS

For early use, sow as soon as ground opens in spring, in drills from 12 to 15 inches apart; thin out to 6 or 9 inches in the rows. For succession, continue to sow every two weeks until June; for fall and winter crop, sow in July and August. The Ruta Bagas are grown for feeding stock, and are also excellent for the table. Take up the roots in November, or before severe frosts; cut off tops within an inch of the crown,

store in cool cellar or pit, or pile up in a conical form, out of doors, in dry ground; cover carefully with long straw, and finish by earthing up, covering them with about 12 or 15 inches of earth, leading a trench around the heap to carry off the water. Put away in this manner, they will be found in good condition in spring.

Standard varieties of Turnips.

	Pkt.	Oz.	$\frac{1}{4}$ -lb.	Lb.
Purple Top, White Globe.....	.10	\$.15	\$.35	\$1.00
Purple Top, Strap Leaf.....	.10	.15	.35	1.00
Early Purple Top Milan.....	.10	.15	.50	1.40
Early White Dutch.....	.10	.15	.35	1.00
Golden Ball.....	.10	.15	.45	1.25
Early Snowball.....	.10	.15	.45	1.25
Long Island Improved Ruta Baga..	.10	.20	.45	1.25



PURPLE TOP WHITE GLOBE

RUTABAGA OR SWEDES

If we expect the greatest rewards for our efforts, it is absolutely essential that cattle, horses and hogs have a mixed diet. How long would humans thrive on an unchanged diet? Animals are no exceptions. Stocks thrive and enhance in value more rapidly when turnip is fed in liberal quantities. From a point of dollars and cents, next to mangels—turnips are the cheapest feed in the world. Sow $1\frac{1}{4}$ to 2 lbs. per acre.

AMERICAN PURPLE TOP RUTABAGA—Roots of large size, globular, with flesh of deep yellow color and finest quality. Skin yellow with purple top. Excellent for table use and stock feeding. Pkt. 10c, oz. 20c, $\frac{1}{4}$ -lb. 60c, lb. \$1.50.

PREPARATION AND CARE OF THE VEGETABLE GARDEN

Prepare the Soil. To get good results the soil should be thoroughly drained; if low and wet put in a tile drain; it will pay. Cover the ground with well-rotted barnyard manure, a good covering of sheep manure, or a high-grade commercial fertilizer. This lightens the soil, increasing its power to hold water. Rake in a thin coating of hydrated lime (in fall or spring) on soils that crack when drying. It improves the physical condition of the soil, increases growth and healthfulness of crops.

Dig or plow the ground deeply (8 to 10 inches) without disturbing the subsoil, and have all of this loose ground **thoroughly pulverized**, then when ready to plant or sow, rake the surface with a Planet Jr. Star Pulverizer or with an iron rake, making it as fine and level as possible.

Preparation of the soil takes time and labor, but pays in the end, as it makes the sowing and cultivating easier and will give you larger and better crops.

Sowing. Radishes, onions, lettuce and other small seeds should be sown very shallow, not over $\frac{1}{2}$ inch deep, larger seeds about 1 inch deep. Peas and beans 1 or 2 inches deep. In dry, hot weather sow and press down the soil 1 inch deeper than in wet weather.

Planting. Set out tomato, pepper, eggplants, etc., as soon as all danger of frost is past. Showery weather is best for this work or late in the afternoon to avoid the effects of the hot sun immediately after planting. Keep the plants thoroughly watered for a few days, and, where possible, keep shaded for two or three days until the plants take root.

Cultivating. The Wheel Hoe should be used if you have a garden 30x50 feet or larger. A Single Wheel Hoe for a small garden, a combined Double and Single Wheel Hoe where there is much work to be done. With a Planet Jr Wheel Hoe you will find the cultivation of your garden easy and pleasant work. With it you will not only do the cultivating quickly and easily, but better than can be done in the old-fashioned way.

Diseases—Insects. There are many of both, and you should be on the lookout for them. At the first sign of trouble, consult your seedsman and he will recommend a preparation to combat it.

DON'TS FOR GARDENERS

- DON'T** push your Wheel Hoe as you would a lawn mower, but push it with successive strokes from six inches in length for delicate work, to the length of a step in other cases—watch the wheel, not the blades or teeth.
- DON'T** draw the tool back between strokes, as this tends to leave the loose soil in bunches instead of evenly distributed, as it should be to get best results.
- DON'T** wait for the weeds to grow before you cultivate, but keep a dust mulch, which is a thin layer of fine soil on the surface. This checks the evaporation of moisture from the lower soil, and saves you time and trouble in watering.
- DON'T** let the weeds get a start. Small weeds are much easier killed than large ones. Remember you are growing vegetables, and every weed in your garden takes considerable moisture and crop value from the soil.

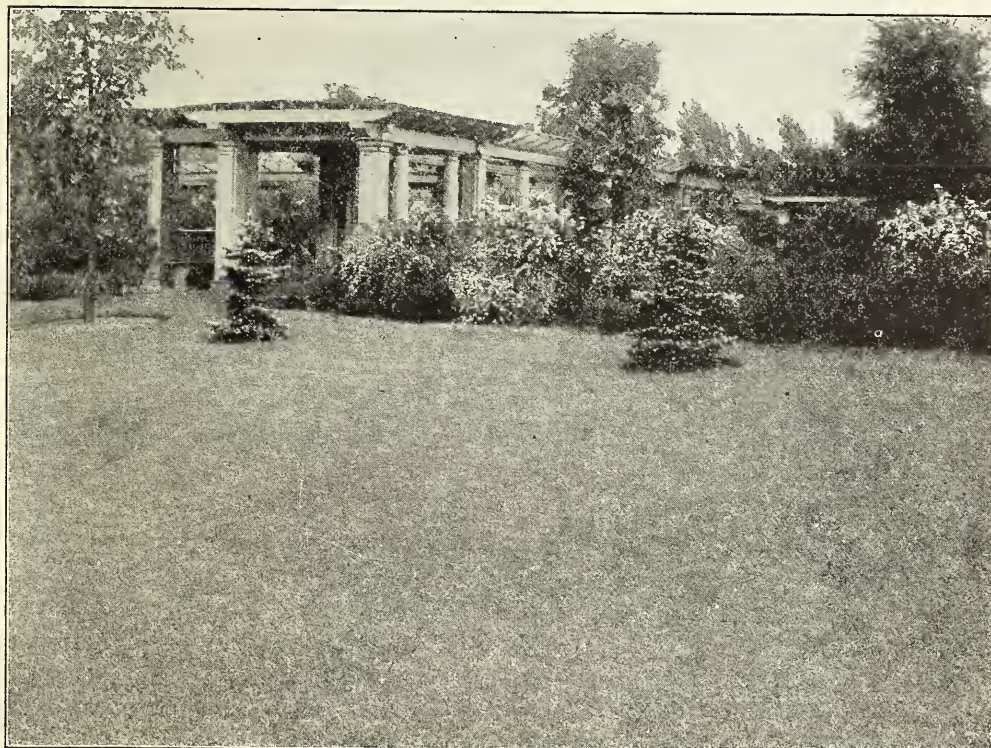
LAWN GRASSES

GRASS SEEDS OF STERLING QUALITY FOR LAWNS, PLAY GROUNDS, GOLF LINKS, TENNIS COURTS, ETC.

Absolutely the best seeds that money can buy and that experience can suggest.

A smooth, velvety lawn adds not only to the value, but enhances the enjoyment of every home. When properly made, a lawn is the best investment a home owner can make. In

making a lawn the ground should be thoroughly drained and well pulverized. The soil ought not to be too rich, as a rapid growth is not wanted in the grasses of a lawn. After the ground is well prepared the seed should be sown and the ground rolled or stamped in order to press the seed firmly into the soil. Seed may be sown in the early fall or spring.



"GOLDEN GATE PARK" LAWN MIXTURE

"GOLDEN GATE PARK" LAWN MIXTURE contains the more hardy grasses which are used to make the sod for the park playgrounds where the grass has to endure much tramping over. The mixture also contains a very little white clover. Per lb. 40c, per 10 lbs. \$3.75, per 100 lbs. \$35.00.

KENTUCKY BLUE GRASS (Velvet Green Brand)—An especially extra fine quality of Blue Grass seed that has been thoroughly milled so as to remove all chaff and light seeds. This in our estimation is the finest quality of Blue Grass produced. Lb. 75c, 10 lbs. \$7.00, 100 lbs. \$60.00.

AUSTRALIAN RYE GRASS (Re-selected Fancy)—A selected, short-seeded, extra heavy, dwarf-growing strain. Will produce a green turf in about three weeks. Sow one pound to a space of 10x15 feet; 100 pounds to the acre. Lb. 25c, 10 lbs. \$2.25, \$18.00 per 100 lbs.

PACIFIC RYE GRASS (California)—A selected strain of Perennial Rye Grass, producing a fine dwarf-growing plant of fine velvety texture, especially fine for sandy soils. Lb. 30c, per 100 lbs. \$25.00.

GOLDEN STATE LAWN GRASS MIXTURE—Is a scientific blending of our own composed of various fine leaved grasses of the finest quality, which will flourish under varied soil conditions in adverse climate giving throughout the year a luxuriant rich green velvety sward. For best results sow one pound of seed to each 150 square feet. Lb., postpaid, 60c, 10 pounds \$5.50.



WHITE CLOVER

WHITE CLOVER (Pacific Quality)—The finest and purest strain for lawns. It makes an excellent turf that stands constant tramping. It is of dwarf habit, the stems creeping and rooting at the joints; it spreads rapidly and is very hardy. Sow one pound in a space 10x35 feet. Lb. \$1.00.

Write for prices on larger quantities.

Grasses for Pastures and Hay

GRASS SEEDS

We desire to call particular attention to the fact that Grass Seeds are sold in the trade by sample, and each sort is divided into three or four grades of quality, according to purity, germination and weight. The price of the best grade is often double that of the ordinary. The Grass Seeds here offered by us are in every case the **Very Highest Grade**. Not less than one pound of any one sort sold.

25 lbs. and up of any one sort at the 100 lb. rate.

Subject to Market Changes.

Write for Prices in Quantity.

AWNLESS BROME—An erect perennial, 3 to 5 feet high. We recommend it for dry, arid soils. Sow 40 pounds per acre. Lb. 45c.

ORCHARD GRASS—A valuable grass for pasture or hay land, and on account of its earliness is very well adapted for a permanent pasture. It furnishes the first green grass in the spring and until late in the fall. When closely cropped it grows up quickly and is ready for grazing again in ten to twelve days. When grown for hay, more than one crop can be obtained in one season, and when only one crop is cut the aftergrowth is very heavy and gives splendid and rich pasture till late in the fall. It will stand drought and is hardy. It grows in tufts, and is therefore best sown with red clovers, rye grass, etc. It is well

suited for shady places, such as orchards and groves. Grows on all kinds of land, but does best on deep, rich, sandy loam or clay soils. Sow 22 pounds to the acre when alone, or proportionately with other grasses. Lb. 40 cts.

AUSTRALIAN or PERENNIAL RYE—The seed is large and heavy and produces a strong, verdant growth in four or five weeks after sowing. Hay sweet flavored and is much favored by horses and cattle. Sow 60 pounds to the acre. Lb. 25 cts.

ITALIAN RYE GRASS—Annual; a remarkable grower, and has in addition the advantage of standing extremes of temperature, remaining green throughout the winter. It is a most valuable grass. Sow 50 pounds to the acre. Lb. 25 cts.

BERMUDA GRASS—Valuable both for pasture and lawns; when established, it is difficult to eradicate, and is therefore unsuitable for temporary pasture. Sow 10 pounds to the acre. Lb. 65c.



SUDAN GRASS

SUDAN GRASS—No more important addition has been made to the hay crop of this State than Sudan Grass. It yields from 2 to 8 tons of hay per acre, depending upon whether irrigated or not. Two cuttings are assured and in places four have been taken. The hay is of superior quality and relished by all stock. Cut with a mower just after full bloom. Plant late in spring after frost is past. If drilled in 36-inch rows, you will require 2 to 4 lbs. of seed; if seeded 18 to 20 inches, 4 to 6 lbs.; if broadcast, 15 lbs. If second grade is wanted, write us. We can meet prices. Ours is the best strain of this wonderful grass. Lb. 25 cts., 10 lbs. \$1.50.

MEADOW FESCUE, or ENGLISH BLUE GRASS—Especially adapted for permanent pasture and is also fine for hay. Grows two to three feet high, but not in tufts like Orchard Grass. The hay is very nutritious and cattle thrive on it whether dry or green. Succeeds even in poor soil, and as the roots penetrate deep, from 12 to 15 inches, it takes extremely dry weather to affect it. As a fertilizer

it has valuable properties. It will stand freezing very effectively, and its use is becoming more widespread each year. About 24 pounds of seed is sown to the acre. Lb. 45 cts.

RED TOP (Solid Seed)—A valuable grass for moist, rich soils, where it thrives very luxuriantly. It is a good variety to sow with Timothy and Clover for meadow or pasture and is more permanent than either of the other two. It has been grown successfully even on alkali land where other grasses failed. Red Top is commonly known as Herd's Grass and should be more extensively grown, especially with other grasses. Solid Seed Red Top is free from chaff and weighs 42 lbs. to the bushel. Ten pounds required to the acre. Lb. 35 cts.

TIMOTHY—As a crop for hay, Timothy is probably unsurpassed by any other grass. It is greatly relished by all kinds of stock, especially horses. It yields more nutritive matter than any other grass or forage plant. Ten pounds required to the acre when sowed alone. Lb. 25 cts.

DRY PASTURE MIXTURE—This is a special mixture of Grasses that we recommend for hillside pastures. Sow 30 lbs. per acre. 45c per lb., 10 lbs. \$4.00.

WET OR LOWLAND MIXTURE—This produces abundant pasture or hay in damp or lowland locations. Sow 30 lbs. per acre. 40c per lb., 10 lbs. \$3.50. Larger quantities price on application.



RED TOP

\$9.00. Write for prices in larger quantities.

TALL MEADOW OAT GRASS (*Avena Elatior*)

—Of rapid luxuriant growth, recommended for soiling and in permanent hay mixtures, also for winter grazing. This variety is not a lawn grass. Sow 50 lbs. per acre. It is highly recommended for dry hillsides and in mixtures for dry locations. 50c per lb., 10 lbs. \$4.50. Write for prices in larger quantities.

RHODES GRASS—A new hay and pasture grass of great value because of its drought-resisting qualities. It also thrives in poor soils where other grasses and alfalfa fail. Plant about 14 lbs. per acre. The best time to plant is from March until September. Price \$1.00 per lb., postpaid; 10 lbs. \$9.00. Write for prices in larger quantities.

CLOVERS AND ALFALFA.



MELILOTUS ALBA (SWEET CLOVER)

MELILOTUS ALBA—(Sweet Clover)—See page 27.

WHITE DUTCH (*Trifolium Repens*)—Dwarf spreading vine-like variety, with white blossoms; used largely for bee pasture. It is also an excellent pasture plant for either sheep or cattle; also makes a beautiful lawn. Sow 10 lbs. per acre. Lb. \$1.00, 10 lbs. \$9.00. If interested in cheaper grades, write us.

HUBAM CLOVER—See page 2.

CLOVER SEEDS

Owing to frequent market fluctuations write for Quantity Prices. If ordering by mail add postage at zone rate.

ALSIKE (*Trifolium hybridum*)—Very hardy, resisting cold and drought and is also well adapted for sowing on cold wet land. It yields a large amount of hay or pasture and makes a good bee plant. 40c per lb., 10 lbs. \$3.50.

ALFALFA, or LUCERNE CLOVER (*Medicago sativa*)—This increases in demand each year, as it is found to be very valuable for forage. It requires deep, rich, well turned soil, as it roots very deeply, the tap root often to a depth of 10 to 15 feet in loose soil; consequently it is able to resist great droughts. The seed should be sown at about the same time as oats, in thoroughly prepared, deep ploughed soil. Twenty to twenty-five pounds per acre. It is a perennial and if the soil is suitable several crops may be cut every year. Lb. 35c.

HAIRY PERUVIAN ALFALFA—See page 2. 40c lb.; 10 lbs., \$3.50.

CRIMSON CLOVER (*Trifolium Incarnatum*)—It makes a very valuable crop for pasture or green manure. For hay it should be cut when in full bloom. Flowers are bright scarlet. Largely grown in all Southern States. Sow twenty pounds per acre. Lb. 40 cts.

BURR CLOVER (*Medicago Denticulata*)—The native forage plant of California. Of the easiest culture, growing all winter and well into summer. We offer only "Hulled seed," which is much easier to sow than in the burr. Sow

Clovers and Alfalfa—*continued*

August to October using 15 to 20 pounds of hulled seed per acre. Per lb. 30c.

RED CLOVER (*Trifolium pratense*)—Medium. One of the most valuable farm crops in the West, for soiling, hay, or turning under as green manure. Requires deep, rich soil and yields two crops in a season. Sow 15 lbs. to the acre. Lb. 35c.

MELILOTUS INDICA (Bitter Clover)—See page 27.



ALFALFA

DWARF ESSEX RAPE—Rape has been usually grown, until recent years, to furnish pasture for sheep and lambs, but it is now being found equally good in providing pasture for all kinds of stock. It is an annual, bearing a close resemblance in leaf and stalk to the Ruta Baga, but



ESSEX RAPE

both leaves and stocks are more numerous in the Rape plant, and of a taller habit of growth. It is a pasture plant which may be eaten off by any kind of live stock, but it is pre-eminently fitted to furnish pasture for sheep, cattle and swine. Sow 5 pounds per acre; if sown in drills, 1½ to 2 pounds will suffice. Lb. 15c., 100 lbs. \$12.00.

FIELD SEEDS

COW PEAS, WHIPPOORWILL or SPECKLED—Largely sown to make a rich, succulent growth to plow under to enrich the soil. This makes a good, long vine. Mixed with Soy Beans they make an excellent crop. Will grow in an acid soil. Sow 60 lbs. per acre. Lb. 20 cts. Write for other prices.

MILLET, LIBERTY (*Panicum Germanicum*; Var)—Will grow on any good land and yields heavily when artificially watered; yields from 40 to 60 bushels of seed per acre, which is excellent food for stock or poultry. A good, green fodder plant. Sow 30 lbs. per acre. Lb. 20 cts. Write for prices.

MILLET, HOG MILLET—The seed is large for a millet and makes a rich food. Good for hogs and chickens. The seed ripens while the stem is yet green, so that if cut promptly you can get a crop of seed and also one of fodder or ensilage as well. Lb. 20 cts., 10 lbs. \$1.20. Write for other prices.

TEOSINTE (*Reana Luxurians*)—This plant grows quickly and produces a large quantity of forage in warm locations. It makes splendid dry fodder, yielding enormously, and being more nutritious and better relished by all stock than corn fodder. The seed should not be sown until all danger of frost is past. If cut for green forage, which can be done at any stage during growth, two or more joints should be left at the base of the stalks. These will sprout out quickly into fresh growth, making an even larger crop than at first cutting. Sow in drills 4 feet apart, using 4 pounds of seed to an acre. Oz. 10 cts., lb. 60 cts.

BUCKWHEAT (Common)—The best and most profitable variety. It is earlier than Silver Hulled and usually more productive. It is also excellent for bee pasture. Sow 25 lbs. per acre. Lb. 15 cts.; larger quantities on application.

BROOM CORN succeeds in a good deep soil, fresh but not damp. Used for making brooms. Sow 12 to 15 pounds per acre. Lb. 10 cts.; 100 lbs. \$7.00.

FENUGREEK—Annual. This seed is often sought by hostlers to give temporary fire and vigor to their horses. It is frequently given to oxen and pigs when fattening, causing them to drink and digest their food. Considered to be good for soiling when green. Oz. 10 cts., lb. 30 cts.

MAMMOTH RUSSIAN SUNFLOWER—The giant of all sunflowers. The best variety for the farmer. Growing to double the size of the common, and the yield of the seed is twice as great. It is highly recommended for poultry; the best egg-producing food known. The leaves make splendid fodder, much relished by all kinds of stock. The seed is good feed for horses, and yields a fine quality oil. Oz. 5 cts., lb. 10 cts., 10 lbs. 90 cts.

JERSEY KALE—Thousand Headed Kale is a variety of cabbage. The plant attains a height of 3 to 4 feet. The stem is covered with leaves which form small heads. Animals, especially sheep, eat it greedily. It grows well on most any land and is hardy. The seeds may be either drilled or broadcasted, but we think drilling is better. If drilled, plant in rows 26 to 30 inches apart, so that plants may be thinned out so as to stand 16 to 18 inches apart in the rows. In drilling use ¾ to 1 pound of seed to the acre. In broadcasting, 1½ pounds is required. Prices by mail, postpaid, large pkt. 10 cts., ¼-lb. 45 cts., lb. \$1.25.

FIELD CORN, LEAMING IMPROVED—Probably planted over a greater area of country than any other sort on account of its great adaptability. Ripens in 100 to 110 days under favorable conditions in central corn belts. The ear is tapering, length 10 inches, circumference 7 inches; kernel smooth and firm on the cob; 18 to 20 rows, with medium spaces between; well filled and rounded tips and butts; kernels yellow and wedge shaped; cob red, of medium size. Lb. 10 cts.

FIELD SEEDS (Cont'd.)

FIELD CORN, EARLY CANADA—Very early, ears medium size, usually ripens in August. Ripens well in the Northern States; a popular New England variety. Lb. 10 cts.

EVERGREEN SWEET FODDER CORN—All varieties of sweet corn possess very much more "sugar" than any feed sort, and this being the most important constituent, it necessarily follows that the corn holding this in greatest quantity has the greatest net value. Evergreen Sweet Fodder grows much taller than the Early Sweet Fodder and makes well formed, but not matured ears in almost any part of the Northwest. Lb. 15 cts.

DO NOT FAIL TO INOCULATE your legumes such as vetch, peas, beans, clovers, alfalfa, etc. It now only costs you 50c per acre. See page 59.

The cheapest crop insurance in the world.

SOYA BEAN—Thrives well in hot and dry weather. Plant at the rate of 60 pounds to the acre, in drills 2½ to 3 feet apart, and cultivate same as field corn. It does not make good hay, but is good as ensilage or green fodder. Lb. 15 cts., 100 lbs. \$7.00.

VETCHES, SPRING TARES (*Vicia sativa*)—Sown broadcast at rate of 60 to 100 pounds to the acre, like wheat or barley, and sometimes mixed with oats for soiling. This is a very popular forage plant and is rapidly becoming more popular each season as the farmers of this country are learning more of its great value. It is valuable as a cover crop to prevent leaching and for forage and fertilizing purposes. When sown in August or September it covers the ground before frost and can be turned under in early spring as a fertilizer. Sown in March or April, it can be cut in June. Lb. 15 cts. Write for prices on larger quantities.

HAIRY VETCH—Sold out.



FIELD CORN



SOYA BEANS

SEEDS SUITABLE FOR COVER OR GREEN MANURE CROPS

COW PEAS (Black Eye)—Specially adapted to warm countries; extensively grown in our Southern States; also valuable in this latitude as a fodder plant; their chief value, however, is as a green crop to plow under. The seed should not be sown till the ground has become well warmed. Sow in drills 60 lbs. to the acre, 100 lbs. broadcast. Lb. 15c, 100 lbs. Write for prices.

BOKHARA, OR SWEET CLOVER (*Melilotus Alba*)—Grows three to five feet high, covered with small white flowers of great fragrance. Very valuable for bee pasture. Also for cattle pasture. Bokhara roots deeply and is a very hardy grower. It grows abundantly in Nevada. It is a biennial which reseeds itself. Sow 10 lbs. to the acre. Lb. 30 cts.

VELVET BEAN—Grows taller and larger than any other soil plant, being sometimes 30 feet in length. Sow same as Cow Peas, in rows five feet apart and in hills four feet apart in the row. Lb. 20 cts., 10 lbs. \$1.50.

PURPLE VETCH—This is a new vetch that stands severe winters better than common vetch. It is highly recommended by the Department of Agriculture and has proved very satisfactory in cold, wet soils where others fail. Sow 30 lbs. per acre. Price, 30c per lb., 10 lbs. \$2.50. Write for prices on larger lots.

MELILOTUS INDICA (Bitter Clover)—An annual quick growing cover crop. Not good for forage or hay. Starts early to grow and is of good size when ready to plow under. Sow 20 to 25 lbs. per acre. Lb. 20 cts., 100 lbs. \$8.50.

BURR CLOVER—(See Clover Seeds).

CANADA FIELD PEAS—A strong, vigorous pea often planted for green manure to plow under in the spring. Makes an excellent winter growth when sown in fall; very useful for fodder. Sow 75 lbs. per acre broadcast. Lb. 15 cts., larger quantities on application.

When in doubt consult us. Information cheerfully given.

VITAMITE

The only bacteria applicable to all plant life. Can be applied directly to all grains, trees, vines, etc., without the use of legumes. Write for special pamphlet. See page 59.



FETERITA

SEED GRAINS

We carry the following seed grains which we quote slightly higher than the market due to the fact that we send out nothing but re-cleaned stock. Due to market changes we are unable to print prices but will gladly quote price and submit samples upon request.

BARLEY

COMMON—We have endeavored to get hold of seed stock that is clean and plump.

RYE

WINTER—Grown for hay by dairymen, but principally for grain; is also planted with Vetch, and in combination makes an excellent fodder.

WHEAT

BLUE STEM—The most popular variety; used principally for hay on account of being beardless; also used in mixture with Black Oats.

SONORA WHEAT—This is the variety used in lower San Joaquin Valley and is very suitable for warm, dry climates.

TURKEY RED—Used for blending in the manufacture of flour, on account of its hardness and high gluten content; it has also become very popular for poultry feeding.

OATS

BLACK—Used principally along the Coast, where fogs prevail, where other sorts of oats would rust.

RED (Coast Red Oats)—Are used principally in the interior to insure a change of seed; they are easily distinguished

by their dark color from those grown away from the Coast.

RED (Inland Oats)—Are also used extensively and produce the same quality of hay as the Coast Oats. There is probably more Red Oat hay grown than of any other variety, and it is deservedly popular.

SORGHUMS

KAFFIR CORN, White—Grows from 6 to 10 feet high and thrives in hot, dry climates. Makes good fodder for cattle and the seed is used for stock and chicken feed. Sown in rows three feet apart, using three to five pounds per acre. Lb. 20 cts. Write for prices.

SHALLU OR EGYPTIAN WHEAT—A tall-growing sorghum which has many stalks from one root. Sow in rows for grain, using 3 to 5 pounds per acre, or broadcast, using 30 pounds for fodder. Lb. 20 cts. Write for prices.

DWARF WHITE MILO—Succeeds under a wider range of conditions than others of its class. Yields very heavily in grain and also heavily in fodder or silage. Our seed is specially grown and selected for heavy yield. Lb. 15 cts. Write for prices.

HONEY SORGHUM (Saccharine)—For Forage and Silage—Anywhere that Indian Corn can grow this crop can be successfully raised and will stand more drought and heat. Honey Sorghum is the new heavy yielding forage crop, and the sure one to fill the silo. It grows from 8 to 12 feet high and produces rather slender leafy stalks. In tonnage this new Honey Sorghum gave 27 tons per acre without irrigation. Write for prices. Pound 15 cts.

EGYPTIAN OR JERUSALEM CORN—The best and surest grain crop for dry countries and seasons. Three feet high. Make one large head on main shoot and several small heads on side shoots. Sow 3 to 5 pounds per acre. Seed makes excellent chicken feed. Lb. 15 cts.; 100 lbs. \$6.00.

FETERITA—Birds do not eat this grain Sorghum to the same extent that they do others, and this is a great advantage in some localities. Feterita yields heavily in grain. Lb. 15 cts. Write for prices.

SUGAR CANE, EARLY AMBER—Amber Cane for a green fodder crop. We think it the best green food that can be grown for feeding cows, horses and young stock during the dry spells which we have every August and September. Even fodder corn does not produce so rich and rank a growth of good feed for so little money as Sugar Cane. Sow 60 pounds to the acre. Lb. 15 cts., 100 lbs. \$6.00.

Don'ts for Gardeners

DON'T allow a crust to form nor cracks to open on the surface of the soil. Keep it thoroughly pulverized at all times excepting in wet weather. Cultivate at least once a week, and after rain as soon as the ground is in workable condition.

DON'T try to cultivate small garden crops two or three inches deep— $\frac{1}{2}$ or $\frac{3}{4}$ inch will give better results and you will be surprised how much easier your Wheel Hoe will push.

DON'T cultivate when the ground is wet. It is never too dry to cultivate. Cultivation keeps the weeds down, allows air and moisture to reach the roots of the growing plants and stimulates their growth. For success—**CULTIVATE**.

DON'T allow the hoes to get dull. Keep the edges sharp with a file. You will be able to do better work with less effort.

DON'T put away your Wheel Hoe, or any garden tool, without thoroughly cleaning. Keep a rag or piece of burlap handy and when through cultivating, wipe the steels clean. This will prevent rusting and they will do much better work.

California Seed Company's Select Collection of Highest Quality Flower Seeds

ASTERS

A hardy annual of easy culture. Sow seed in February, March or April in open ground and they will bloom finely in August and September. Cover the seeds about one-quarter inch in depth in very light soil, and when the plants have three or four leaves transplant about 20 inches apart in well prepared beds. Unslaked lime or wood-ashes applied to the beds will prevent disease and keep insects away.



Victoria Asters

	Pkt.	¼-oz.
Light Yellow	\$.10	\$.75
White Tinted Rose .....	.10	.75
White turning to Azure Blue.....	.10	.75
Light Lilac .....	.10	.75
Deep Crimson .....	.10	.75
Dark Blue .....	.10	.75
Excellent Mixture, all colors.....	.10	.60

SWEET ALYSSUM

A neat, thrifty, healthy flower and should be cultivated by every one who wants an all-round good plant. Sow the seed wherever they are to remain. If too thick, thin out. To prevent sowing too thickly, mix seed with sand before sowing.

MARTINUM—Flowers pure white, very fragrant. Pkt. 10c.

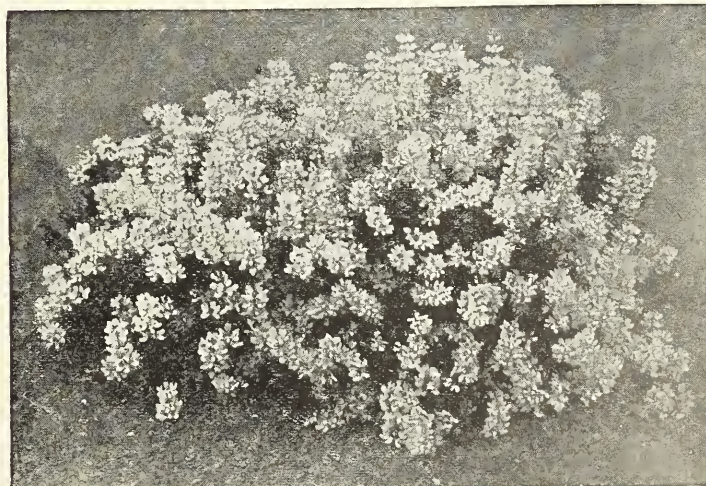


BRANCHING ASTER

Branching or Semples Asters

Best aster for florists, producing fine plants usually 18 inches in height; flowers very large and showy, borne on long, stout stems; valuable for bouquets.

	Pkt.	½-oz.
Bright Rose	\$.10	\$1.00
Crimson .....	.10	1.00
Lavender .....	.10	1.00
Pink .....	.10	1.00
Purple .....	.10	1.00
White .....	.10	1.00
Fine Mixed, all colors.....	.10	1.00



ALYSSUM—LITTLE GEM

ASTER, New England Perennial (Michaelmas Daisies)—In splendid assortment, four to five feet. Very handsome, hardy wild flowers of New England; fall blooming. Blue, lilac and pinkish. Mixed, Pkt. 15c.

GIANT COMET—A taller growing variety of the Comet type, with branching stems, which make it valuable for cutting. Best colors: Crimson, Dark Violet, Light Blue, Rose, White, The Bride (white changing to light rose). Any of the above: Pkt. 10c; collection six varieties, 50c; mixture of all colors, pkt. 10c; ¼-oz. \$1.25.

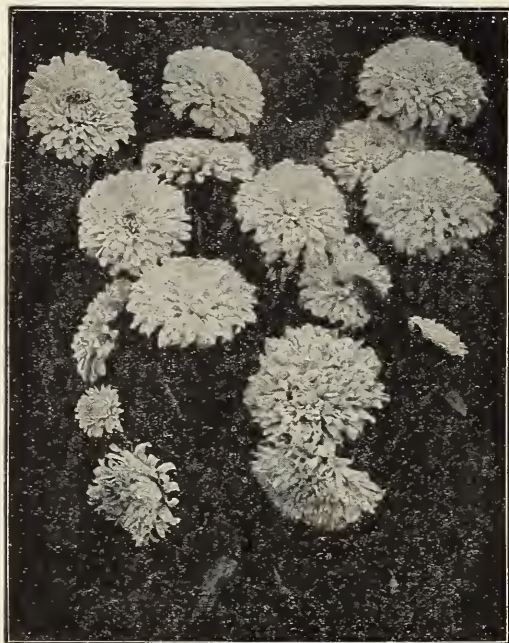
Giant Crego Asters

Packets, 15 cts.

White
Rose

Lavender

Crimson
Purple



GIANT CREGO ASTERS

ANTIRRHINUM or SNAPDRAGON

Giant Flowering

Although perennials they do splendidly when grown as annuals; spring-grown seed produces flowering plants by July, which continue to bloom in increasing profusion until frost. The flowers are nearly double the size of the older sorts. Mixed colors, pkt. 10c.

Snapdragons

	Pkt.
Cottage Maid, pale pink.....	\$.10
Crimson Queen, dark red.....	.10
Amber Queen, blended old rose and yellow.....	.10
White Beauty, pure white.....	.10
Maize Queen, blended bronze and pink.....	.10
Golden Queen, bright yellow.....	.10

ACROCLINIUM—Very pretty annual, producing white and rose-colored daisy-like flowers in August and September. These are the "Immortelles," so desirable for wreaths and winter bouquets. One foot. Double mixed. Pkt. 10c.

AGERATUM (Floss Flower)—A hardy annual of easy culture, especially valuable for bedding, as it is literally covered with blossoms all summer. Sow the seed early in the spring, either in boxes to transplant, or out of doors, and thin to four or six inches.

Blue Perfection—Deep blue, one foot high. Pkt. 10c.

ANEMONE, Single Giant de Caen—The giant French Anemone. Half-hardy perennial. Excellent for cutting

Cup-shaped flowers in blue, red and white. May and June. Nine inches. Pkt. 10c.

St. Brigid (Irish Anemone)—Enormous blooms, the size of tulips, with great variety of striking colors. Pkt. 15c.

ARCTOTIS GRANDIS (The African Lilac Daisy)—A remarkably handsome annual from Africa, forming branched bushes two to two and a half feet in height and breadth; are pure white on the upper surface, reverse of petals pale lilac. Pkt. 10c.



SNAPDRAGON

AMARANTHUS—Hardy annuals, grown especially for their brilliant foliage.

Caudatus (Love Lies Bleeding)—Light yellowish-green foliage; long drooping, crimson flower spikes. Plant three to four feet high. Pkt. 10c.

ASPARAGUS—Seeds start slowly and should be soaked in good warm water before sowing.

Plumosus Robustus—The tall asparagus fern with delicate feathery foliage. Pkt. 10c.

Plumosus Nanus—A dwarf variety and sometimes preferred on account of its beautiful dense sprays of feathery green. Pkt. 10c.

Sprengeri (Emerald Feather)—An early, easily grown, feathery-leaved variety, with drooping branches. The variety for hanging baskets. Pkt. 10c.

AUSTRALIAN PEA VINE (Dolichos Lignosus)—A rapid growing evergreen climbing perennial, flowering freely in clusters of rose pea-shaped flowers. For covering arbors, trellises, etc., they have no superior; h. h. Pkt. 10c.

BALLOON VINE, or LOVE-IN-A-PUFF—Climbing annual, with small inferior flowers. The seed pods are curiously swelled or puffed, and are quite attractive. Pkt. 10c.

BALSAM, or LADY'S SLIPPER—A tender annual, with brittle stems and foliage. Grows about 12 inches high. Flowers both single and double, in bright colors and variations; are wax-like and very attractive. The individual blossoms floating in a dish of water exhibit their beauty to the best advantage.

CAMELLIA FLOWERED. MIXED—The largest double variety. Pkt. 10c.

BELLIS

(English Daisy)

Daisies are easily grown from spring-sown seed, and come into flower in a very short time. They thrive best in cool, shady places, but do well in almost any soil. Admirably adapted for edging, borders and low beds.

LONGFELLOW—Large double pink. Pkt. 10c.

SNOWBALL—Large double white. Pkt. 10c.

MIXED—Double. Pkt. 10c.

MONSTROSA—New double giant daisies. Mixed Pkt., 25c.

MONSTROSA GIANT RED—Pkt. 25c.

BEGONIA

Fibrous Rooted Varieties

For outdoor culture, having beautiful leaves and bearing clusters of small, waxy flowers.

REX—A beautifully marked, large-leaved variety, for indoors. Pkt. 50c.

VERNON—Deep-red flowers and dark-purple foliage often used for borders and for bedding; half hardy. Pkt. 10c.

Tuberous Rooted Varieties

For greenhouse and pot culture, having large, waxy flowers in brilliant colors. Many prefer to start bulbs in December and January.

DOUBLE VARIETIES—Mixed. Pkt. 35c.

INTERNATIONAL PRIZE—The finest large flowered single mixture. Pkt. 35c.

SINGLE VARIETIES—Mixed. Pkt. 25c.

BARTONIA AUREA (Golden Bartonia)—A hardy annual, growing about two feet high and bearing golden-yellow flowers, which have a metallic luster when the sun shines on them. Is a native of California. Sow the seed where the plants are to remain, since it does not transplant easily. Pkt. 10c.

BEAN, Scarlet Runner—A popular climber; the seed is edible and much esteemed. Flowers scarlet; beans black and lake splashed. Pkt. 15c.

BRACHYCOME (Swan River Daisy)—A hardy annual growing from 6 to 10 inches high and producing an abundance of pretty blue and white flowers. Pkt. 10c.

CANDYTUFT

CANDYTUFT (Iberis)—A hardy annual, growing about 6 to 18 inches high, according to the variety. The blossoms are borne on variously long spikes, and the newer varieties are quite large flowering and very fragrant. Of easy culture and valuable for bedding or massing.

COMMON SWEET SCENTED—Small white flowers. Pkt. 10c; oz. 25c.

CARMINE—Branching. Pkt. 10c.

PURPLE—Branching. Pkt. 10c.

GIANT HYACINTH FLOWERED or IMPROVED EMPRESS—Very large heads and long spikes of white flowers. Pkt. 10c; ¼-oz. 25c; oz. 75c. Mixture of all colors. Pkt. 10c.

CALENDULA

CALENDULA—(Orange Prince)—Very hardy annual, one foot high, blooming freely at any time of year and for several months. Is of the easiest culture and is desirable for rather inferior soils, where less sturdy flowers do not thrive. Pkt. 10c.

DOUBLE MIXED—A good mixture of 8 or 10 different shades of yellow, some clear colors and some shaded and striped. Pkt. 10c; oz. 25c.

CALENDULA METEOR—Large double yellow flowers, striped with orange. Pkt. 10c.

CACALIA (Tassel Flower)—A beautiful and profuse flowering plant, with tassel-shaped orange and scarlet flowers; fine for mixed borders. Hardy annual. Pkt. 10c.

CANARY BIRD FLOWER (Tropaeolum Canariense)—A tender climbing annual of the Nasturtium family. Blossoms have curiously winked petals and are light yellow. Soak seed over night before planting. Pkt. 10c.

CANNA—Mixture of the popular varieties. Flowers in red, yellow, and all plants have large ornamental leaves and give a tropical effect. Mixed, pkt. 10c.

CASTOR OIL BEAN (Ricinus)—This has large leaves and a tropical appearance. All it requires to flourish is heat. It is a quick growing annual 6 to 15 feet tall. Leaves are green or reddish. Commercial castor beans are of a different variety.

Gibson's Dark Red—Pkt. 10c, oz. 30c.

Sanguineus—Tricolor—Has blood-red stalks and green leaves, with red veins. Pkt. 10c, oz. 25c.

Zanzibarensis—Mixed. A very large-leaved variety, deep green and bronze, growing 10 to 15 feet high. Pkt. 10c, oz. 25c.

Mixture of all Varieties—Pkt. 10c, oz. 20c.

COBAEA SCANDENS—A fine, large, purple flowered vine; h. h. p. Pkt. 10c.

CYPRESS VINE (Ipomoea Quamoclit)—A tender, climbing annual, with soft fern-like foliage and small star-like flowers in red and pink, or white. Pkt. 10c.

COLUMBINE—(AQUILEGIA)

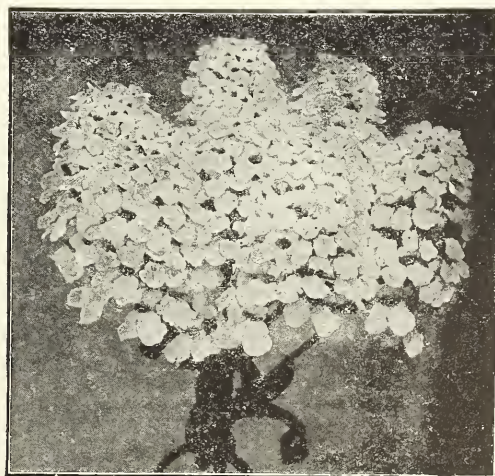
A hardy perennial growing about two feet high and bearing an immense variety of colors on long, smooth stems. Stands partial shade very well.

CALIFORNIA HYBRIDA—Large yellow flowers, orange spurs, an improvement on our native sort. Pkt. 15c.

CHRYSANTHA—Pure golden yellow, single long spurs; three feet. Pkt. 10c.

COERULEA (Rocky Mountain Blue Columbine)—Fine deep blue and white; long spurs. Pkt. 10c.

LONG SPURRED HYBRIDS—Mixed. Pkt. 10c.



CANDYTUFT EMPRESS

CYCLAMEN—

Persicum Giganteum—Mixed. Very large flowers and very free blooming. Pkt. 25c.

CALCEOLARIA

HYBRIDA GRANDIFLORA TIGERED—Fine greenhouse plants, beautifully blotched, striped and variegated; seed saved from the finest flowers. Pkt. 25c.

RUGOSA (Shrubby)—True bedding variety; innumerable very small flowers. Pkt. 25c.

COSMOS

The popular fall flowers. A strong, tall growing annual. Most effective when planted in masses or long background borders against evergreens or fences. Seed sown in February will bloom by August and continue in bloom until killed off by frost.

CAL. GIANT WHITE—Pkt. 10c.

CAL. GIANT PINK—Pkt. 10c.

CAL. GIANT RED—Pkt. 10c.

CAL. GIANT MIXED—Pkt. 10c.

KLONDYKE—Orange colored. Pkt. 10c.



COSMOS

NEW EXTRA EARLY DOUBLE FLOWERING COSMOS

Ever since the introduction of the Double Cosmos we have been working to get this valuable florists' flower in the Early Type and have at last succeeded in obtaining it in three separate colors; which we take pleasure in introducing for delivery from crop of 1921. They grow to a height of about three feet, forming a perfect bush massed with bloom, bearing beautiful double flowers of good size on long stems; they come about seventy-five per cent double from seed. They bloom in seventy days from the day seed is sown, so that seed sown the latter part of April will easily be in bloom by the Fourth of July and continue until cut down by frost. Pkt. 25c.

COSMOS EARLY FLOWERING DOUBLE WHITE.

COSMOS EARLY FLOWERING DOUBLE PINK.

COSMOS EARLY FLOWERING DOUBLE CRIMSON

CLARKIA

This hardy annual is of easy culture, bearing bright rose, white, or purple flowers in great profusion. The single type is native to California and is a wild flower. Seed sown in the fall will give early blossoms in the spring. Seed can be sown almost any time. The Elegans varieties grow 2 feet tall in spikes; the seedlings should be pinched back twice to make bushy plants, once to 3 inches and again to 9 inches.

DOUBLE ELEGANS—Mixed. Pkt. 10c.

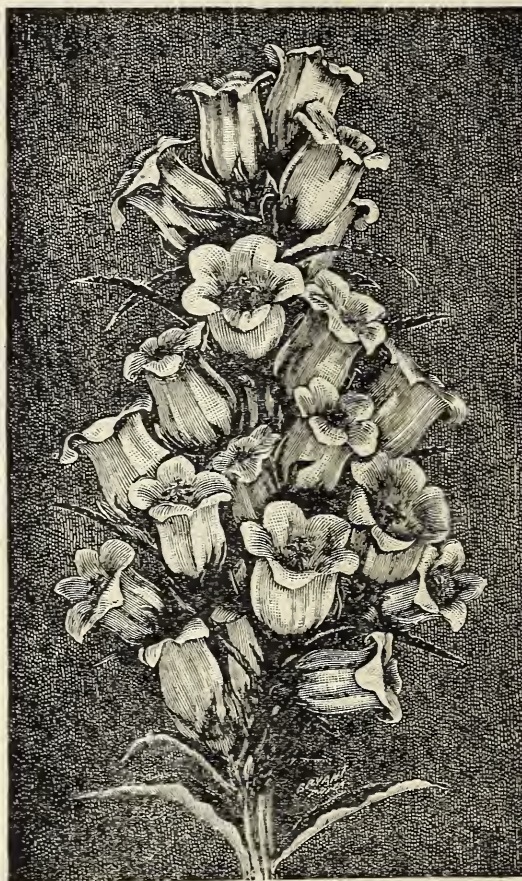
SINGLE ELEGANS—Mixed. Pkt. 10c.

CANTERBURY BELLS

CAMPANULA MEDIUM—A hardy biennial, blooming the second year from seed, or the first year, if sown early. Of easy culture, but preferring rich, moist soil. Grows about three feet high, and bears double and single varieties of blue, white, purple and red flowers. Single Mixed, pkt. 10c; Single White, pkt. 10c; Single Pink, pkt. 10c; Single Blue, pkt. 10c; Double Mixed, pkt. 10c.

CUP AND SAUCER TYPE—In this variety the outer petal forms a brim like a saucer. Light Blue, pkt. 10c; Pink, pkt. 10c; Pure White, pkt. 10c; Mixed, pkt. 10c.

PERSICIFOLIA—Peach-bell; perennial; 4 feet; large flowered. Mixed, pkt. 10c; Blue, pkt. 10c.



CANTERBURY BELLS

CELOSIA

(Cockscomb)

Beautiful plants, producing large, showy plumes, curled and curved, very much resembling ostrich feathers.

CELOSIA THOMPSONI MAGNIFICA—Mixed. Pkt. 10c.

CELOSIA CRISTATA (Glasgow Prize)—Fine crimson. Pkt. 10c.

CELOSIA PYRAMADILIS (Plumosa)—Crimson plumes. Pkt. 10c.

CENTAUREA

A hardy annual embracing a number of species, some being grown only for their foliage. All varieties grow from 1½ to 2 feet high. Sow the seed early and transplant in March. Except the white-leaved sorts all make excellent cut flowers.

CYANUS (Bachelor's Button, or Bluebottle, or Corn Flower)

—Of easy culture. Sow the seed where it is to remain and thin to three or four inches. Mixed, pkt. 10c; oz. 25c.

EMPEROR WILLIAM (Large Blue)—Pkt. 10c; oz. 35c.
Pink, pkt. 10c; White, pkt. 10c.**IMPERIALIS (Royal Sweet Sultan)**—The finest of all Sweet Sultans; the plants are very strong and bear giant flowers on stiff, long stems; excellent for cutting and lasting, when cut unusually well. Mixed, pkt. 10c; ½-oz. 50c; Pure White, pkt. 10c; Purple Shades, pkt. 10c.**CALLIOPSIS**

GOLDEN WAVE—The largest flowering variety. Clear yellow. Pkt. 10c; oz. 60c.

DRUMMONDII—Mixed. A gorgeous mixture of golden yellow, brown, maroon and other shades. Pkt. 10c; oz. 60c.

BICOLOR HYBRIDA SEMIPLANTA—Semi-double flowers of garnet and yellow. The old fashioned small Coreopsis. Pkt. 10c.

LANCEOLATA—Yellow with brown eye; one of the best yellow flowers for cutting. Pkt. 10c.

COLEUS

Splendid bedding plants with beautifully colored foliage, very useful for pot or window gardening; fine Hybrids mixed. Pkt. 15c.

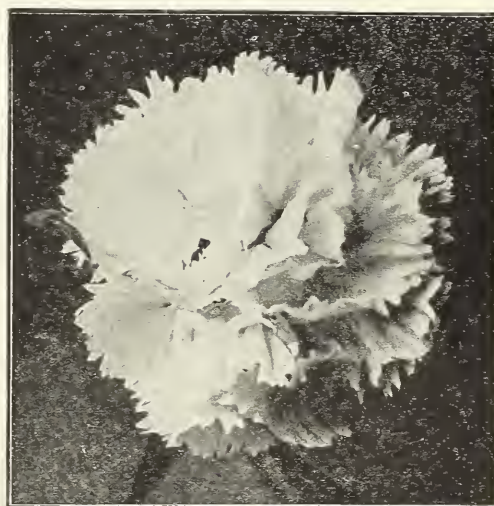
EXHIBITION STRAIN—Finest mixed. Pkt. 25c.

**SUMMER CHRYSANTHEMUMS**

EVENING STAR (Helios)—This is a tall plant with large Marguerite-like flowers of pure golden yellow, three inches in diameter. Flowers are borne singly and are excellent for cutting. Pkt. 10c.

MORNING STAR—Like Evening Star only of different color. This is a soft yellow or primrose color. Pkt. 10c.

NORTHERN STAR—Another variation of these beautiful Marguerites. Fine large ivory-white flowers with sulphur zone. Pkt. 10c.

**CARNATIONS**

DOUBLE DWARF VIENNA—Produces double, very sweet scented flowers in a large variety of colors. Pkt. 10c.

CHABAUD PERPETUAL DOUBLE—Superfine mixture of yellow, red, white, striped, etc. Blooms in 7 months; flowers very large and deliciously fragrant. Pkt. 25c.

MARGARET CARNATION—Very vigorous, hardy race of carnations; bloom in 5 months from sowing. For masses of bloom few plants are finer, producing a profusion of bloom. Pkt. 10c.

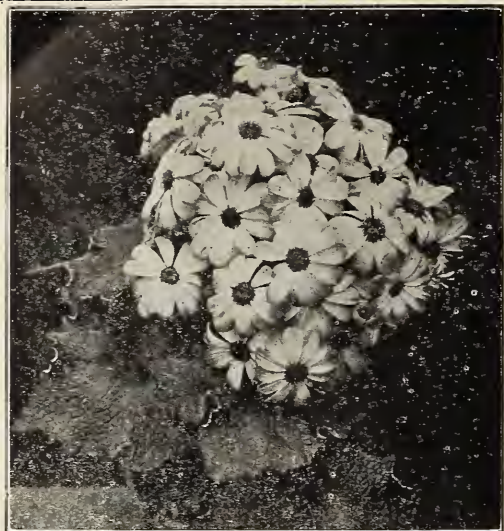
CINERARIA

CINERARIA HYBRIDA (Grandiflora)—A splendid strain of large flowers. Pkt. 25c.

CINERARIA STELLATA RADIATA—Beautiful variety, small star-shaped flowers of fine form, in mixture of beautiful shades of colors. Pkt. 25c.

DAISY—SHASTA DAISY—A fine perennial plant, bearing large white single blossoms, with yellow centers; an excellent cut flower and admired everywhere. Soak seed in warm water before sowing. Pkt. 10c.

ALASKA—One of Burbank's new selections. Pkt. 15c.



CINERARIA HYBRIDA (See page 33)

DIANTHUS—(PINKS)

The brilliant contrasting colors and hardy free blooming nature of these old favorites of our grandmother's time has kept Pinks in the foreranks of public approval for generations. The tints, colors and formations are marvelous and striking. Those of our customers desiring an endless delight will find it in the growing of Pinks.

Sown outdoors when danger from frost is past, and in a few weeks' time they are a mass of bloom.

CHINENSIS (China Pinks)—Large, double flowers of beautiful rich color. Pkt. 5c. ¼-oz. 15c. Postpaid.

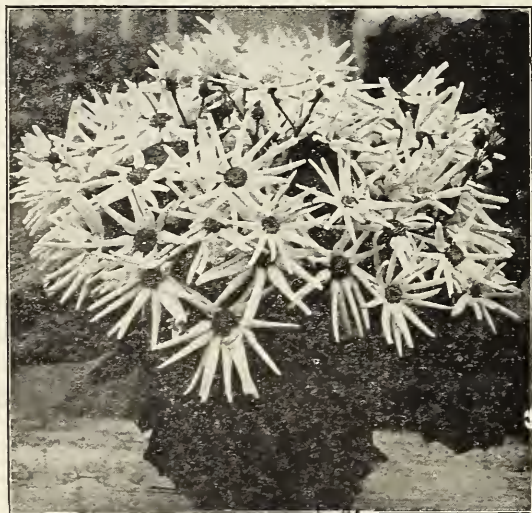
EASTERN QUEEN—Single, beautifully marbled and striped with dark shades of rose on lighter ground. Pkt. 5c. Postpaid.

SNOW QUEEN—Double, large, pure white flowers. Pkt. 5c. ¼-oz. 25c. Postpaid.

FIREBALL—Large, double, globular flowers of brilliant dark scarlet. Pkt. 5c. ¼-oz. 25c. Postpaid.

LACINIATUS MIRABILIS—Single fringed pinks, of beautiful colors. Mixed. Pkt. 5c. Postpaid.

LACINIATUS, DOUBLE—Large, double, showy flowers, in great variety of colors. Pkt. 10c. Postpaid.



CINERARIA STELLATA (see page 33)

DELPHINIUM

(Larkspur)

PERENNIAL VARIETIES—

Formosum—Brilliant blue, white center; especially fine and attractive; 3 feet. Pkt. 10c.

Elatum Hybridum—Very showy; finest mixed colors. Pkt. 10c.

ANNUAL VARIETIES (See cut)—

Tall German—Splendidly bright and showy; 2 feet. Pkt. 10c.

Emperor Mixed—Produces abundance of long, slender flowers; fine for cutting. Pkt. 10c.

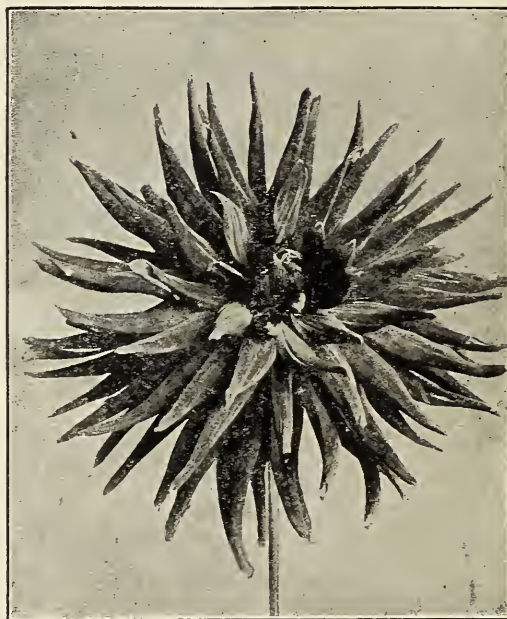


LARKSPUR

DAHLIA

SINGLE DAHLIA—Best mixture. Pkt. 10c.

CACTUS DOUBLE—Extra fine strain of this favorite type; mixed. Pkt. 10c.



CACTUS DAHLIA

DOUBLE DAHLIA—Good mixed from fine varieties. Pkt. 10c.

SEMI-DOUBLE PAEONY FLOWER DAHLIA—Mixed colors. Pkt. 10c.

ESCHSCHOLTZIA

(Commonly called California Poppy)

GOLDEN WEST—A superb variety with deep yellow flowers. Pkt. 10c; oz. 20c; lb. \$1.75.

BURBANK'S CRIMSON—Very fine. Pkt. 10c; oz. 30c.

CARMINE ROSE—Splendid shade. Pkt. 10c.

FOXGLOVE

(Digitalis)

GLOXINIA FLORA—Very handsome, gloxinia-like flowers; very robust; fine for cutting. Fine Mixed, pkt. 10c.

FORGET-ME-NOT

ALPESTRIS INDIGO BLUE—Indigo blue flowers. Pkt. 10c.

ALPESTRIS ROSEA—Pretty rose flowers. Pkt. 10c.

ALPESTRIS VICTORIA—Sky blue; for borders and pots. Pkt. 10c.

ALPESTRIS MIXED—Good mixture. Pkt. 10c.

GLOXINIA

GLOXINIA—Beautiful hot-house plants, with large, bell-shaped blossoms, which come in rich, velvety-deep, and bright colors, some of which are beautifully marked. Sow in the fall or early spring. Grandiflora, Mixed, pkt. 25c.

GAILLARDIA

(Blanket Flower)

GRANDIFLORA—Fancy selected seed from the finest and largest flowers; color rich crimson, with a border of canary yellow; very fine (perennial). Pkt. 10c.



GAILLARDIA

GEUM, Mrs. Bradshaw—A brilliant scarlet-cardinal flower the size of a large carnation, which it somewhat resembles. Pkt. 10c.

GILIA—A hardy annual growing one foot high, with white, lilac or rose-colored flowers. A native of California. Valuable for rock-work or borders. Sow seed in the fall. Mixed. Pkt. 10c.

GOMPHRENA, or GLOBE AMARANTH—(h. a.)—Everlasting with round heads about 1 inch in diameter; rose, yellow or white; 8 inches tall. Mixed. Pkt. 10c.

GOURDS—Some varieties, besides being odd, are very ornamental.

Mixed Ornamental Varieties—Small sorts. Pkt. 10c.

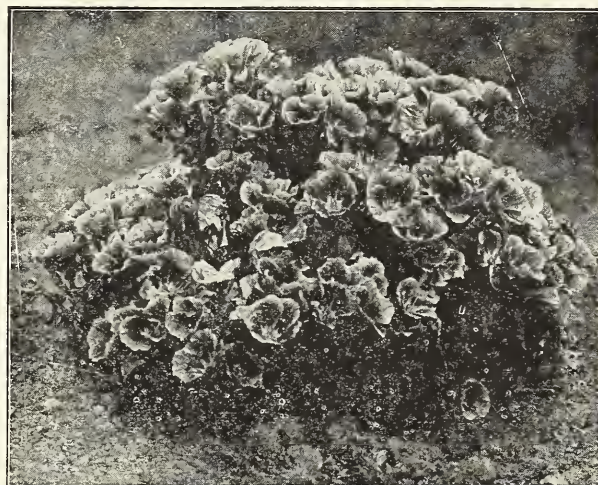
GYPSOPHILA (Baby's Breath)—The feathery plant with little star-shaped flowers used in making up bouquets. Grows easily in every garden; 2-3 feet; h. a.

ELEGANS—Flowers very largely grown by florists for use in bouquets; white with faint dark lines. Pkt. 10c.

PANICULATA—Fine for bouquets; white flowers; perennial. Pkt. 10c.

GODETIA

Sow seed in the open border in spring, or in a cold-frame, and transplant seedlings to stand about a foot apart in rather thin soil. Fine for cut-flowers. Average height, 1½ ft.



GODETIA

WHITNEYI FULGIDA—Crimson scarlet (new); very showy. Pkt. 10c.

THE BRIDE—White with blush spots. Pkt. 10c.

LADY ALBERMARLE—Dark crimson. Pkt. 10c.

LORD ROBERTS—Darkest red; very fine. Pkt. 10c.

FINE MIXED—Pkt. 10c.

HELICHRYSUM (Everlasting Flower)—Is the best and most satisfactory of the everlasting flowers and makes a very handsome dried bouquet; 3-4 feet, h. a.

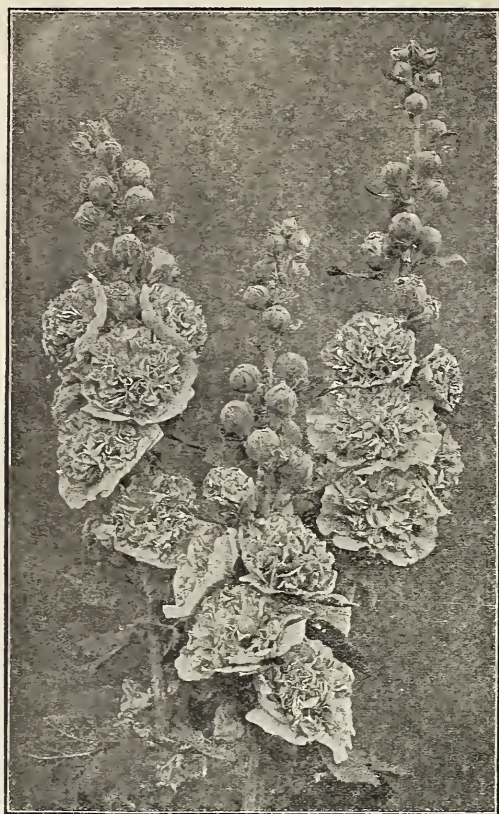
Monstrosum—Mixed. Pkt. 10c.

HELIOTROPE—Beautiful porch climber 4-8 feet tall. Flowers are delightfully fragrant, are small and come in clusters. Blooms the first season from seed if sown early. Forms a large plant and requires a roomy situation. Can also be grown as a pot plant; h. h. p. Finest mixed. Pkt. 10c.

CHATER'S FAMOUS HOLLYHOCKS

HOLLYHOCK (Finest Double Varieties)—These fine old-fashioned perennials are most striking when seen in groups or long rows against evergreen shrubbery, fences or hedges. Seed should be sown in early spring or late fall in boxes or pans. When planting in the open, set each plant about 2 feet apart. Our seed is saved from the finest double flowers grown from Chater's celebrated collection. Mixed Colors, pkt. 10.

KUDZU VINE (Pueraria Thunbergiana)—Called also Jack-and-the-Beanstalk; h. p. The first year it will do 10 feet and the next up to 50. Fine for a permanent vine. Pkt. 10c, oz. 60c.



CHATER'S FAMOUS HOLLYHOCKS
(See page 35)

KOCHIA TRICHOPHYLLA (New)—Pyramidal habit, half-hardy annual, small feather-light green foliage, turning a lovely crimson hue in September. Pkt. 10c.



KOCHIA TRICHOPHYLLA

LOBELIA

The following dwarf and trailing varieties of this popular and beautiful flowering plant will be found most desirable for pot culture, edgings, hanging baskets, etc., blooming profusely from June to November. The hardy perennial varieties are among the most desirable for pot culture, edgings, hanging baskets; beautiful spikes of handsome flowers.

CRYSTAL PALACE COMPACTA—Dark blue. Pkt. 10c.

BARNARD PERPETUAL—Deep blue, with white eye. Pkt. 10c.

EMPEROR WILLIAM—Light blue, very fine. Pkt. 10c.

CARDINALS (perennial)—Long spikes of richest cardinal red. Pkt. 10c.

LANTANA—A tender perennial, often becoming shrub-like, 2 to 3 feet high, bearing verberna-like clusters of flowers, in orange, rose and other colors. Blooms constantly all summer. Fine mixed. Pkt. 10c.

LAVENDER—Delightfully fragrant flowers; p. Pkt. 10c.

LATHYRUS LATIFOLIUS (Perennial, or Everlasting Pea)—A hardy perennial climber, thriving in any good soil. Pkt. 10c.

RUBRUM (Scarlet Flax)—A very showy bedding plant, as the flowers are right on top of the plants. The plant is in bloom for a long time and a bed makes a mass of bright color. Pkt. 10c, oz. 50c.

PERENNIAL FLAX—Blue. Pkt. 10c.

LUPINUS OR LUPINS

Hardy native California annuals, in great variety, growing from one to three feet high, and bearing spikes of pea-shaped flowers. Hartwegii Lupins are much improved, large flowering annuals. These come into flower early and bear fine spikes 2 feet tall. Of the easiest culture. Sow in the open ground and thin to six inches apart.

NANUS—Our little blue and white wild flower. It carpets the fields in late May. Plant by the pound over your grounds. Pkt. 10c, oz. 35c, lb. \$3.25.

POLYPHYLLUS—This is an extra handsome Lupin. The flower spikes are tall (1½ ft.) and the leaves are rich bright glossy green. Attractive at all times; p. Mixed. Pkt. 10c, oz. 40c.

MARIGOLD

Old garden favorites like the Calendula are valuable because they produce such a wealth of brown and yellow far into the early winter. Effective when planted in groups or in the border.

AFRICAN ORANGE—Tall, rich orange. Pkt. 10c.

AFRICAN MIXED—Tall. Pkt. 10c.

FRENCH—Tall, dark brown. Pkt. 10c.

FRENCH DWARF—Striped, handsomely marked. Pkt. 10c.

ELDORADO—African, fine double yellow. Pkt. 10c.

MIGNONETTE

(Sow at any time)

We offer the following varieties of this popular, fragrant flower, all of which are very fine for potting, bedding or borders:



MIGNONETTE

GOLDEN MACHET—Golden yellow. Pkt. 10c; oz. 35c.

ALLEN'S DEFIANCE—Spikes of great length; very fragrant; fine for cutting. Pkt. 10c; oz. 50c.

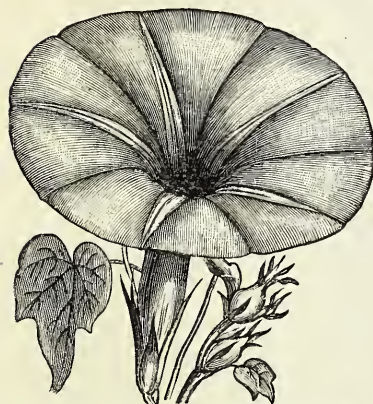
RESEDA ODORATA—Old-fashioned sweet Mignonette. Pkt. 10c; oz. 25c.

MORNING GLORY AND MOON FLOWERS

Too well known to need description. All the varieties are pretty and succeed under almost any condition, and produce a quick and most luxuriant growth.

HEAVENLY BLUE—Very large clustered flowers of beautiful sky blue; open early in the morning; distinct and handsome. Pkt. 10c.

SETOSA (Brazilian Morning Glory)—This vine makes an immense, thick growth of great lobed leaves, lighted by a profusion of large rosy flowers, with a satiny pink star in the center. The red pubescent stems and seedpods add to its attractiveness; 10 to 20 feet. Pkt. 10c.



MOONFLOWER—HEAVENLY BLUE

IMPERIAL JAPANESE

—The leaves are mostly plain green, but some are oddly blotched with white or yellow. Flowers vary from pure white to carmine, through blues and purples of every shade to almost black. Vines vigorous, growing rapidly to a height of 10 or 20 feet, and their foliage is spangled with hundreds of large and lovely flowers. Pkt. 10c.



MUSA ENSETE

MUSA ENSETE, ABYSSINIAN BANANA

THE ABYSSINIAN BANANA TREE—Strikingly effective as single specimens as well as in clumps or masses. The rapidity of its growth is astonishing. Seed sown early in hot-beds and repotted several times will give plants eight feet high the first summer. Pkt. of 10 seeds, 15c.

MIMULUS—A half-hardy perennial, growing from six inches to one foot high. Blooms freely and exists in a large variety of colors. Useful for window gardens and pot work, or for gardens in a moist, shady situation.

MOSCHATUS, or MUSK PLANT—Fragrant plant, with small, yellow blooms. Pkt. 10c.

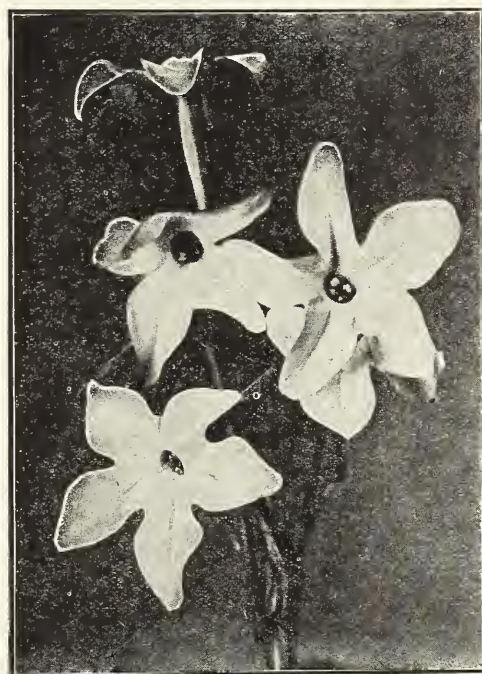
NEMESIA—Nemesias come 1 foot high and are a mass of flowers, bedding annual.

TRIUMPH—Mixed. This has flowers in light blue, red, yellow and terra cotta. Compact form. Pkt. 15c.

NEMOPHILA, or LOVE GRASS—A hardy annual California wild flower, growing about six inches high. Has small cup-shaped blossoms about one inch in diameter, in white and shades of blue. Mixed. Pkt. 10c.

INSIGNIS (Baby Blue Eyes)—Its flowers are of a most beautiful light blue, shading lighter toward the center. A pretty wild flower. Pkt. 10c; oz. 40c; lb. \$3.75.

NIGELLA, or LOVE-IN-A-MIST—A hardy annual, one foot high, with finely cut foliage. Oddly shaped blossoms in blue and white, and curious seed pods. Of easy culture. Pkt. 10c.



NICOTIANA

NICOTIANA—The well-known flowering tobacco, fine for bedding or for planting as a background in borders for lower growing plants.

AFFINIS—Splendid pure white bouvardia-like flowers on long terminal tubes. See illustration. The attractive flowers are very fragrant. Pkt. 10c.

AFFINIS—NEW HYBRIDS—The plants average two feet in height; are pyramidal in form, and bloom profusely. The flowers are larger in size than the Sanderae Hybrids and more distinctly fragrant. In colors they range through creamy white and rose tints to bright red and crimson. Pkt. 10c.

DWARF NASTURTIUM

These have a neat, compact habit, forming a small round bush 10 to 15 inches high. Sow seed in open border where they are to remain when all danger from frost is over. Fine for window boxes, rockeries, borders, etc.

ASHES OF ROSES—Rose. Pkt. 10c; oz. 15c.

BRONZE COLORED—Very fine. Pkt. 10c; oz. 15c.

KING THEODORE—Deep crimson. Pkt. 10c; oz. 15c.

EMPRESS OF INDIA—Intense scarlet, dark foliage. Pkt. 10c; oz. 15c.

OTHELLO—Very dark. Pkt. 10c; oz. 15c.

GOLDEN QUEEN—Bright yellow. Pkt. 10c; oz. 15c.

- PRINCE HENRY**—Yellow, marbled scarlet. Pkt. 10c; oz. 15c.
CLOTH OF GOLD—Foliage yellow, flowers scarlet. Pkt. 10c; oz. 15c.
DWARF MIXED—All colors. Pkt. 10c; oz. 15c; ¼-lb. 40c; 1b. \$1.40.
VARIEGATED-LEAVED DWARF MIXED—A splendid range of colors of these new variegated-leaved sorts. Pkt. 10c; oz. 40c.

TALL NASTURTIUM

Used for covering embankments, stone walls, trellises, fences, etc.

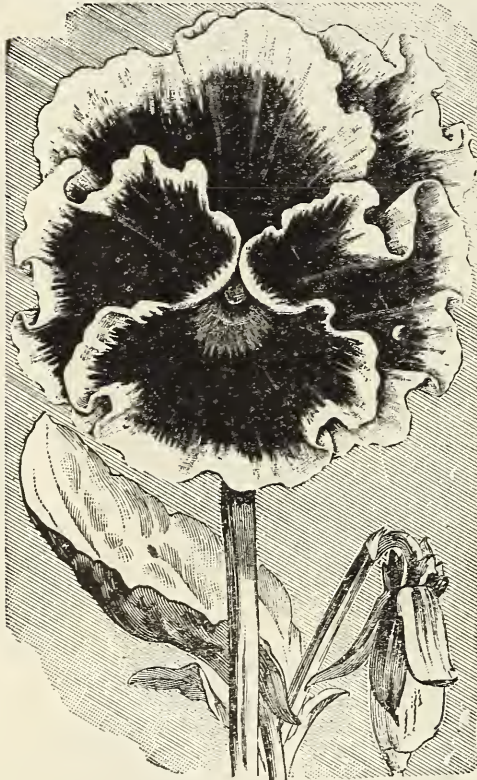
- BLACK PRINCE (new)**—Darkest. Pkt. 10c; oz. 15c.
KLONDYKE—Rich golden yellow. Pkt. 10c; oz. 15c.
EDW. OTTO—Brownish lilac. Pkt. 10c; oz. 15c.
HEINEMANNI—Chocolate. Pkt. 10c; oz. 15c.
REGALINUM—Purplish violet. Pkt. 10c; oz. 15c.
VON MOLTKE—Bluish rose. Pkt. 10c; oz. 15c.
BUTTERFLY—Yellow, blotched red. Pkt. 10c; oz. 15c.
TALL—All colors, mixed. Pkt. 10c; oz. 15c; ¼-lb. 40c; 1b. \$1.40.

GIANT FANCY PANSIES

(Exhibition Strains)

PANSIES IN NAMED VARIETIES—Pkt. 10c.

- Giant Candidissima**—Pure white.
Giant Emperor William—Ultramarine blue.
Giant Gold Margined.
Giant Yellow—With black eye.
Giant Lord Beaconsfield—Violet purple, shading to light blue.
Giant Faust—Black
Giant Mad. Perrett—Wine shades on white ground.
Giant Victoria—Wine red.



MASTERPIECE

MASTERPIECE GIANT—A remarkable type, the border of each petal being conspicuously curled or waved, giving the flower a double or globular appearance. Pkt. 15c.

GIANT TRIM-ARDEAU—A large French strain of Pansies. Flowers very large, carried well up above the foliage, and generally marked with large blotches; fine mixed. Pkt. 15c.

LARGE FLOWERING VARIETIES—Finest mixed. Pkt. 10c; ¼-oz. 60c; oz. \$2.00.

CASSIER'S FINEST FRENCH MIXED—Flowers of grand size, beautifully spotted. Pkt. 25c.

OUR GIANT FANCY EXHIBITION STRAIN—The richest and most choicely variegated mixture possible, including every shade of color, splendidly spotted, striped and variegated. Pkt. 50c.

BUGGNOT'S SUPERB BLOTCHED—One of the best mixtures; three-blotched strain; upper petals finely lined or veined, with dark blotch at the base of each petal. Pkt. 25c.

PETUNIAS

CALIFORNIA RUFFLED GIANTS—Very large, wide-opened blossoms, beautifully ruffled, fluted, and fringed; superb mixture. Pkt. 25c.



CALIFORNIA RUFFLED GIANT PETUNIAS

DOUBLE LARGE FLOWERING—Great favorite for pot culture. Our seed will produce large, fragrant, elegantly formed flowers, brilliantly colored. Grand mixture. Pkt. 35c.

PETUNIA HYBRID MIXED—Pkt. 10c.

PORTULLACA

(Rose Moss)

Plants will grow and bloom profusely in a hot and dry situation where most other plants would soon die. Sow in April.

SINGLE—All colors, mixed. Pkt. 10c.

DOUBLE—All colors, mixed. Pkt. 10c.

PYRETHRUM HYBRIDUM

(Large, Single, Aster-like Flowers)

The flowers of this new strain grow to enormous size, and present all the beautiful variations of color between light pink, rose and deep carmine. They are splendid cut flowers and equally valuable in borders. The plants are perfectly hardy and increase in size from year to year. Pkt. 15c.

PYRETHRUM AUREUM (Golden Feather)—Very popular border plant, used extensively with Lobelia. Pkt. 10c.

PYRETHRUM HYBRIDUM—Pkt. 10c.

PENTSTEMON—Pentstemon sends up spikes of bright colored and spotted flowers somewhat like the Foxglove, but in a great variety of carmine shades and colors; decidedly beautiful; h. p. Mixed. Pkt. 10c.



PHLOX DRUMMONDI

(One of the Showiest Annuals)

GRANDIFLORA COCCINEA—Large brilliant scarlet. Pkt. 10c.

GRANDIFLORA KERMESINA SPLENDENS—Vivid crimson. Pkt. 10c.

GRANDIFLORA ALBA—Pure white. Pkt. 10c.

GRANDIFLORA MIXED—All colors. Pkt. 10c.

PHLOX DECUSSATA (Perennial)—Mixed, all colors. Pkt. 10c.

ANNUAL POPPIES

SHIRLEY, or SILK—Our strain is one of great excellence and contains all of the beautiful delicate colors. Pkt. 10c; ¼-oz. 15c; oz. 35c.

ADMIRAL—Large pure white with a broad crimson border. Pkt. 10c; oz. 35c.

GLAUCUM (Tulip Poppy)—Striking tulip shape; flowers of a dazzling scarlet. Pkt. 10c; ½-oz. 25c.

UMBROSUM—Rich crimson, spotted black. Pkt. 10c.

DANE BROG—Large single, scarlet with white cross. Pkt. 10c.



ADMIRAL POPPY

MIKADO—Double, large white flowers, fringed rose. Pkt. 10c.

CARNATION—Double flowered, very double fringed flowers; mixed. Pkt. 10c.

PERENNIAL POPPIES

ICELAND POPPIES (Nudicaule)—These Poppies bloom the first year from seed. The colors range from purest white to deepest orange. Excellent for cutting. Pkt. 10c.

ORIENTAL—Enormous flowers of deep, flashing scarlet; hardy anywhere. Pkt. 10c.

ORIENTAL HYBRIDS MIXED—Fine mixture. Pkt. 10c.

ALPINE POPPY—Plants grow in low tufts, producing lovely flowers in white, rose, salmon and orange. Pkt. 10c.



POPPY ORIENTAL

RANUNCULUS—Very handsome double flowers, 10 inches high, about two inches across. Blooms the first year from seed. Mixed. Pkt. 10.

RHODANTH⁷ (Everlasting Flower)—For winter bouquets the blossoms should be gathered before fully expanded, and if dried in the shade will retain their brilliancy for years. Everlasting rose and white mixed. Pkt. 10c.



PRIMROSE

PRIMULA CHINENSIS—Pretty green-house or pot plants, bearing bright colored, large, fringed single flowers; finest mixed. Pkt. 25c.

PRIMULA AURICULA—Beautiful shades of color; splendid mixed. Pkt. 25c.

PRIMULA ELATIOR (English Primrose)—Fine mixed. Pkt. 10c.

SALPIGLOSSIS (Beautiful Annuals)

LARGE FLOWERING MIXED—Very beautiful, hardy annual plants, flowering freely from June to early autumn. Seed may be sown in April, where they are to flower. Rich soil should be provided, with plenty of space for plants to develop. Pkt. 10c.



EMPEROR—This new variety forms but one leading stem and bears at its summit a veritable bouquet of the most beautiful flowers; finest mixed. Pkt. 10c.

SALVIA

SPLENDENS BONFIRE—Well known, compact, free blooming variety, with dense, flaming scarlet spikes. Pkt. 10c.

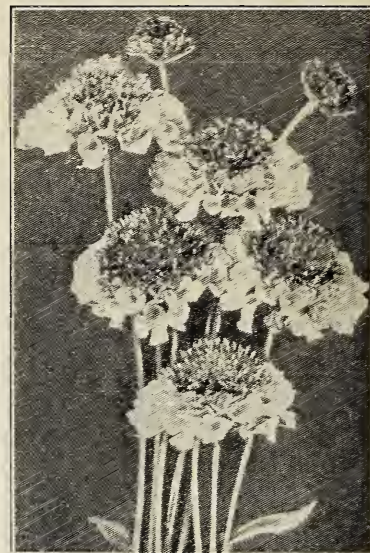
SPLENDENS GRANDIFLORA—A rich scarlet flower. Pkt. 10c.

SALVIA PATENS—Handsome, tender perennial, with erect spikes of rich blue flowers. Pkt. 25c.

SCHIZANTHUS

SCHIZANTHUS—Hardy annuals, growing one and one-half to two feet high and covered with bright, showy, butterfly-like blossoms. Large flowering. Mixed. Pkt. 10c.

WISSETONENSIS—This variety is remarkably free-flowering, and presents a beautiful appearance with its myriads of blooms, the ground color of which is white, dotted with delicate rose. Pkt. 25c.



SCABIOSA

(An Old Favorite, Greatly Improved)

In recent years Scabiosas have become very popular on account of the great improvement over the old-fashioned type. Not only are the colors finer, but the flowers are much larger. Sow seed in the ground in March where they are to remain, and thin out to about 10 inches apart. As a cut flower they will last in water a week or more.

Grandiflora Pure White—Pkt. 10c.

Grandiflora Double Rose—Pkt. 10c.

Grandiflora Double Lilac—Pkt. 10c.

Grandiflora Double Cherry Red—Pkt. 10c.

Grandiflora Double Black Purple—Pkt. 10c.

Grandiflora All Colors Mixed—Pkt. 10c.

AZURE FAIRY—A very lovely, rich pale blue. Pkt. 10c.

CAUCASICA—Handsome, hardy perennial, height about 2 feet; flower delicate lavender blue. Pkt. 10c.

SUNFLOWER

(Helianthus)

Stately decorative plants with great masses of yellow flowers. Sow seed in the open ground and thin out the plants to stand about 3 feet apart. Sow in March.

STELLA—Handsome, large single yellow flowers. Pkt. 10c.

DOUBLE CALIFORNIA—Dark yellow; attractive. Pkt. 10c.

SINGLE GIANT RUSSIAN—Pkt. 10c.

SWEET WILLIAM

(Dianthus Barbatus)

A well-known garden favorite; attractive; free flowering perennial; effective for beds or borders. Sow in early spring or September and October.

SINGLE—All colors mixed. Pkt. 10c.

DOUBLE—All colors mixed. Pkt. 10c.

SWEET WILLIAM (Sutton's Scarlet or Scarlet Beauty)—A grand selection from Pink Beauty, of vivid scarlet color. Pkt. 10c.

STOCKS

(Gillyflowers)

One of our most desirable annuals, either for pots or bedding. The plants have good habits, fine leaves, beautiful and fragrant flowers, in all refined colors. They are unsurpassed for profusion and duration of bloom. Start the seed in February or March, or September and October.

DWARF DOUBLE TEN WEEKS—Large flowering, long spikes, mixed colors. Pkt. 10c.

GIANT PERFECTION—Tall, handsome spikes, large flowers, rose-like, mixed colors. Pkt. 10c.

BROMPTON STOCKS—Hardy biennials; sown in early spring, will flower in fall and all through the winter; mixed colors. Pkt. 10c.

GIANT NICE ALMOND BLOSSOM—White, shaded carmine. Pkt. 15c.

GIANT NICE QUEEN ALEXANDRA—Rosy lilac. Pkt. 25c



DWARF DOUBLE TEN WEEKS STOCKS



GIANT NICE STOCKS

GIANT NICE BEAUTY—Delicate flesh pink. Pkt. 10c.

YELLOW—Pkt. 10c.

THUNBERGIA or BLACK-EYED SUSAN—A hardy annual climber, growing about 4 feet long. Blossoms are buff, orange or white, with dark centers. Mixed. Pkt. 10c.

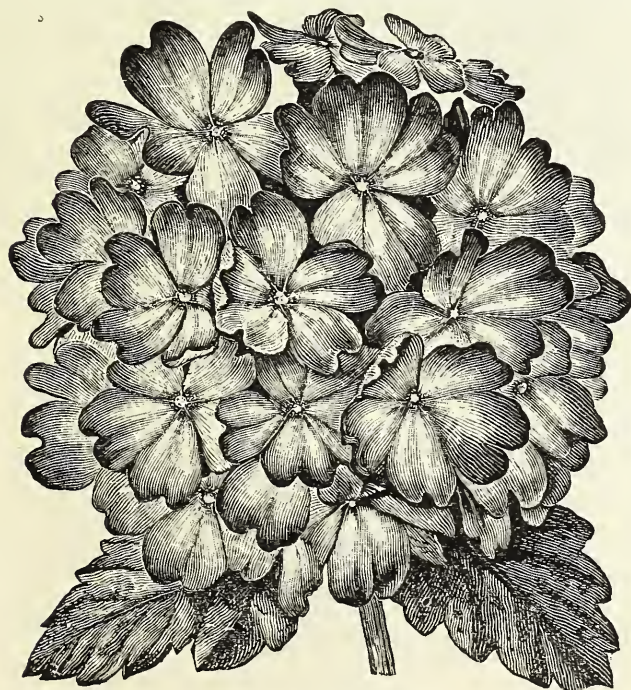
GIANT NICE CRIMSON KING—Very beautiful. Pkt. 15c.

PRINCESS ALICE—Pure white. Pkt. 10c.

STATICE SINUATA (Sea Lavender)—A blue everlasting flower much used by florists for winter bouquets. Annual, two to three feet. Each floweret is small, but the plant is very effective. The seed is difficult to germinate. Pkt. 10c.

MAMMOTH VERBENA

A carefully selected and improved fine strain of Verbenas. The trusses and individual flowers are of the largest size, brilliant colors, free blooming and of vigorous habit. For best results sow seed early in pots or boxes and transplant in beds in April or May. Single plants of this pretty annual



MAMMOTH VERBENA

will carpet a space 3 feet in diameter with neat foliage and scores of fine flower umbels. Plants bloom from early summer to late fall.

MAMMOTH SCARLET—Pkt. 10c.

MAMMOTH PURPLE—Pkt. 10c.

MAMMOTH PINK—Pkt. 10c.

MAMMOTH WHITE—Pkt. 10c.

MAMMOTH MIXED COLORS—Pkt. 10c.

If you love flowers and expect to grow them successfully remember to watch for insects. Aphis or plant lice are easily killed by a spraying of Black Leaf 40. See page 55.

All leaf-eating insects such as caterpillars, measuring worms, slugs, etc., should be sprayed with Arsenate of Lead or Pestroy. Mildew, rust, curly leaf, etc., can be destroyed by Qua Sul. See page 56.

If other insects trouble you send in a specimen—we will advise you.

ZINNIA

(Youth and Old Age)

Zinnias are one of the easiest grown and most showy garden annuals. Few flowers are so easily grown from seed sown in the open ground, or bloom so abundantly and continuously through the entire season as this hardy annual. Sow seed in open ground in spring.

TALL ROBUSTA ZINNIAS—

Crimson
Flesh
Pink

Yellow
Mixed
Packet 15c.

WALLFLOWER

Wallflowers should be better known. Their adaptability for pot culture and outdoor bedding and their peculiarly sweet odor, should win favor. They are easily grown, and last long as cut-flowers.

SINGLE BLOOD RED—Pkt. 10c.

SINGLE MIXED—Pkt. 10c.

DOUBLE MIXED—Pkt. 10c.



ZINNIA, TALL ROBUSTA GRANDIFLORA
These Bear Flowers from 4 to 5 Inches in Diameter

VIOLAS, or TUFTED PANSIES—These have smaller flowers than the regular pansies, but bear them so profusely that they are preferred for bedding effects where color only is wanted; 6 inch. h. h. p.

PURPLE— (Cornuta)—Pkt. 10c.

YELLOW—Pkt. 10c.

WHITE—Pkt. 10c.

MIXED—All varieties. Pkt. 10c.

VIOLET, or VIOLA ODORATA—Although these flowers do best propagated from cuttings, they grow readily from seed, and have a very fragrant blossom.

SINGLE BLUE—Pkt. 10c.

FEED YOUR PLANTS IF YOU EXPECT RESULTS

We carry all kinds of Fertilizers and Plant Stimulants. See page 59.

For outside garden work we recommend Gold Bear and Red Eagle Brand Fertilizers. Use at the rate of 5 lbs. to space 10x10 feet. Holland Peat is very valuable to break up heavy soil and put body into sandy soils. For window boxes use Flora Fertilizer. When pot plants look shabby apply Plant Stimulant or Flora Ferro Stimulant.



WALLFLOWER



GIANT SPENCER SWEET PEAS

Spencer Sweet Peas

Any of the following varieties, Packet, 10c, ounce, 50c.

AMERICA—Red flake, white ground.
 AFTERGLOW—Reddish mauve violet wings.
 APPLE BLOSSOM—Rose and blush waved.
 ASTA OHR—Lavender suffused mauve.
 BARBARA—Beautiful salmon.
 CAPT. OF THE BLUES—One of the best.
 CLARA CURTIS—True primrose.
 COUNTESS SPENCER—Lovely shade light pink.
 ELFRIDA PEARSON—Large shell pink.
 FIERY CROSS—Orange cerise.
 GEORGE HERBERT—Rosy carmine.
 ILLUMINATOR—Salmon orange.
 KING EDWARD—True crimson.
 KING WHITE—Pure white.
 LORD NELSON—Navy blue.
 LOVELY—Delicate rose and flesh.
 MARGARET MADISON—Azure blue.
 MARIAN BEAVER—New light apricot.
 MRS. ROUTZAHN—Apricot suffused pink.
 NUBIAN—Chocolate.
 OTHELLO—Deep maroon.
 R. F. FELTON—Lavender.
 STIRLING STENT—Salmon orange.
 WEDGEWOOD—Fine blue.
 SILVER GILT MIXTURE—Superb mixture of many shades and varieties of Spencer's Sweet Peas. Pkt. 10c, oz. 30c, ¼-lb. 85c, lb. \$3.00.

CUPID SWEET PEAS—These are planted in the border and along the edging of the walks, producing a beautiful effect. Mixed colors. Pkt. 10c, oz. 50c.

SWEET PEA SEED

Giant Fancy Spencers

We offer a Special Collection of SEVEN CALIFORNIA BEAUTIES

Spencer Sweet Peas 50c

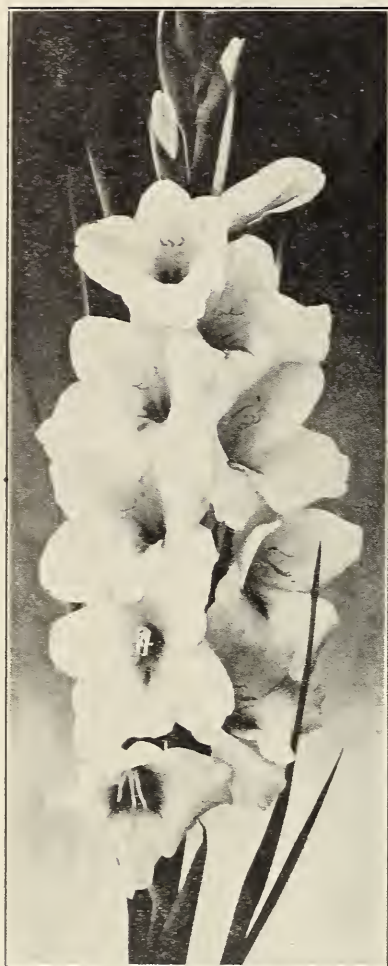
ASTA OHN, beautiful lavender
 COUNTESS, exquisite pink
 HELEN LEWIS, fine orange salmon
 KING EDWARD, brilliant scarlet
 KING WHITE, giant pure white
 MRS. ROUTZAHN, apricot and pink
 SENATOR, chocolate striped

Postpaid



LARGE FLOWERING GLADIOLI BULBS

(If Wanted by Mail Add Postage at Zone Rates. 1 Doz. Weigh 1 lb.; 100 Weigh 9 lbs., Packed)



	Each	Per Doz.	Per 100
AMERICA—Great favorite: soft flesh pink.....	\$.07	\$.75	\$5.00
AUTUMN QUEEN—Cream yellow, suffused pink, with carmine stripe.....	.10	1.00	7.50
BRENCHLEYENSIS—Vermillion scarlet, very fine variety .....	.10	1.00	7.50
CHICAGO WHITE—Giant pure white flowers.....	.08	.80	6.00
CRACKER JACK—Dark red, deep yellow and maroon blotch in throat.....	.15	1.50	10.00
EMPRESS OF INDIA—Deep purplish red, almost black	.10	1.00	7.50
GLORY OF HOLLAND—White with slight tinting of pale pink.....	.10	1.00	7.50
GOLDEN KING—Bright, glistening yellow with strik- ing crimson blotch.....	.15	1.50	10.00
HALLEY—Beautiful salmon pink, creamy blotch in throat .....	.07	.75	5.00
LOVELINESS—Rich creamy white suffused rose pink lower petals pale yellow.....	.10	1.00	7.50
MRS. FRANCIS KING—Flaming pink blazed with ver- million red.....	.07	.75	5.00
MRS. FRANK PENDLETON—Salmon pink, rich deep maroon blotch on lower petal.....	.11	1.15	8.00
MRS. WATT—Brilliant wine color of American Beauty rose .....	.15	1.50	10.00
NIAGARA—Soft primrose, faint lines of lilac in throat	.10	1.00	7.50
PANAMA—Similar to America but deeper shade of pure rose pink.....	.07	.75	5.00
PINK BEAUTY—Earliest of all pinks, crimson blotch	.07	.75	5.00
PRINCEPINE—Fine carmine red with white spots.....	.08	.85	6.00
ROUGE TORCH—Clear white with bright carmine torch in throat.....	.10	1.00	7.50
WILLY WIGMAN—Soft pink with blood red blotch....	.10	1.00	7.50
GOLDEN STATE GLADIOLI MIXTURE.....		.75	5.00

Plant Gladiolus Bulbs in any Good Garden Soil 3 inches Deep from Dec. to April

TREE, PALM AND SHRUB SEEDS

Acacia Baileyana.....	Pkt. 15c; oz., 50c	Eucalyptus Resinifera.....	Pkt. 15c; oz., 90c
Acacia Melanoxylon.....	Pkt. 15c; oz., 50c	Eucalyptus Robusta.....	Pkt. 15c; oz., 60c
Acacia Mollissima.....	Pkt. 15c; oz., 50c	Eucalyptus Rostrata (Red Gum).....	Pkt. 15c; oz., 50c
Calif. Fan Palm.....	Pkt. 15c; oz., 20c	Eucalyptus Tereticornis (Gray Gum).....	Pkt. 15c; oz., 50c
Cypress Monterey.....	Pkt. 15c; oz., 35c	Grevillea Robusta (Silk Oak).....	Pkt. 15c; oz., 50c
Cypress Arizonica or Blue.....	Pkt. 15c; oz., 50c	Date Palm, 100 seeds.....	50c
Cypress Lawson's.....	Pkt. 15c; oz., 50c	Pepper Tree.....	Pkt. 10c; oz., 20c
Eucalyptus Citriodora.....	Pkt. 35c; oz., \$2.00	Monterey Pine.....	Pkt. 15c; oz., 50c
Eucalyptus Corynocalyx.....	Pkt. 15c; oz., \$1.00	Sugar Pine.....	Pkt. 15c; oz., 50c
Eucalyptus Ficifolia (Scarlet Gum).....	25c	Yellow Pine.....	Pkt. 15c; oz., 50c
Eucalyptus Globulus (Blue Gum). This is the most popular Gum Tree in California. A very rapid grow- er and making valuable hardwood.....	Pkt. 15c; oz., 75c	Nut Pine.....	Pkt. 15c; oz., 50c
		Sequoia Gigantea (Big Tree).....	Pkt. 15c; oz., \$1.00
		Sequoia Semperirrens (Calif. Redwood).....	Pkt. 15c; oz., 50c

IF YOU DON'T FIND WHAT YOU WANT IN THIS CATALOG WRITE US

Horticultural Tools and Supplies

All tools and supplies (except liquids and poisons) may be sent by parcel post at zone rates. Prices do not include postage except where noted.

GARDEN STAKES—Heavy, square, painted green. White tipped, made of redwood and impossible to rot. Per dozen, 3 feet, \$1.00; 4 feet, \$1.50; 5 feet, \$1.75.

BAMBOO CANES—3 ft., 20c doz.; \$1.25 per 100; 4ft., 25c doz.; \$1.50 per 100; 5 ft., 30c doz.; \$1.75 per 100; 6 ft., 35c doz.; \$2.25 per 100.

Hose and Hose Accessories

FOX MOULDED HOSE—Best grade of pliable pure rubber hose made. Made by the new moulded process which makes a stronger, tougher, more durable hose. This is not the same kind you can buy everywhere, because it will last. $\frac{1}{2}$ -inch, in 25-ft. lengths, at 16c (weight, 25 ft., 9 lbs.); in 50-ft., at 15c; $\frac{3}{4}$ -in., in 25 ft., at 18c (weight, 25 ft., 12 lbs.) in 50 ft., at 17c per foot.



PLOVER—SMOOTH HOSE—Same price as Fox.



PELICAN—CORRUGATED HOSE—Same price as Fox.

"Perfect Clinching" Hose Mender



Slip it in the hose and hammer down—that's all.

It leaves the hose as smooth and strong and tight as a new hose. It does the work of the mender tube and the two clamps formerly used. Made in $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ sizes. Price, 10c each.

"Perfect Clinching" Hose Coupling

The Original



Self fastening. Slip it in the hose and hammer down—that's all.

A self-fastening coupling that does not require extra bands, bolts or wires. It adjusts itself to any thickness of hose.

A Fixed Hold—It will not pull off and cannot turn within the hose.

A Smooth Joint with no projecting parts.

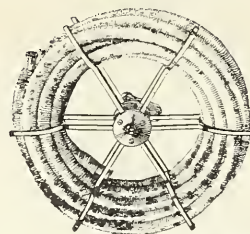
A Perfect Joint that cannot leak.

Requires one tool—a hammer.

Made in $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$ -inch sizes. Price, 40c a set.

HOSE CLAMPS—Sherman—Tighten with nut and screw. Use with hose couplings. $\frac{1}{2}$ -inch and $\frac{3}{4}$ -inch, 10c each; \$1.00 dozen. (Weight, 10 ozs.) 1-inch, 15c.

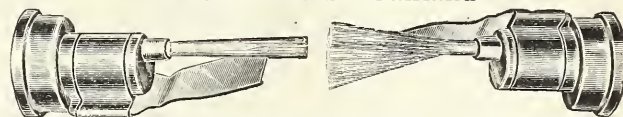
HOSE WASHERS—"Secure Washers"—The wire which crosses the washer absolutely holds it in place. No more wasted time and patience looking for a washer which "was there yesterday." No postage if ordered with seed. 4 washers for 5c.



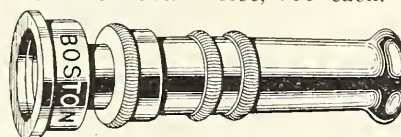
HOSE REEL—Simplex; a compact hose reel suitable for home gardens; made entirely of metal. \$1.75 each.

RUBBER HOSE WASHERS—Plain for $\frac{1}{2}$ -in., $\frac{5}{8}$ -in., or $\frac{3}{4}$ -in., 10c per doz.

Hose Nozzles—Oakland

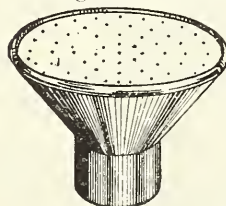


Throws a solid stream or graduated spray. The stream being broken after it leaves the pipe does not create any back pressure on the hose. Price, 75c each.



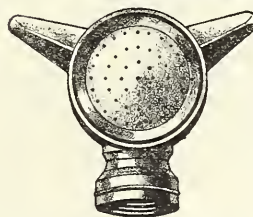
BOSTON—Adjustable course to fine spray. The most popular nozzle. (Weight, 8 ozs.). 90c each.

ROSS—A fan-shaped nozzle for fine work in greenhouse or garden. 90c each.



BRASS ROSE—For sprinkling either greenhouse or garden. (Weight, 5 ozs.). 75c each.

LAWN SPRINKLERS

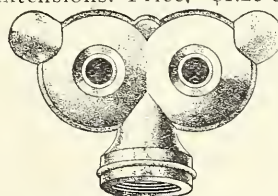
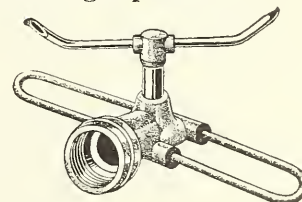


Thompson
"Shower"
Lawn Sprinkler
Brass Lined

A shower sprinkler in a practical form and at a medium price. The perforated head is made of heavy sheet brass. The water is delivered uniformly over a large area. An attractive window display article. Body made of zinc. Price, 50c.

Thompson "Junior" Revolving Sprinkler

An unusually efficient little revolving sprinkler. With 50 pounds pressure will cover a circle about 30 feet in diameter. The sprinkler head is mounted directly upon a zinc base with wire extensions. Price, \$1.25 each.



Thompson
"Twin" Lawn Sprinkler
Patented Dec. 3, 1912
Brass Lined

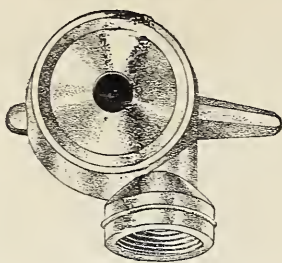
This unique type operates perfectly under either high or low water pressure. The water is delivered in a finely divided spray over a large area. Price, 40c.

Lawn Sprinklers (Continued)

**Thompson
"Simplex" Lawn Sprinkler**

Patented Dec. 3, 1912

Brass Lined

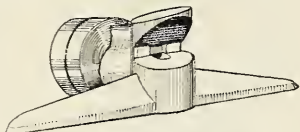


A lawn sprinkler conforming in many respects to the general type but with improved construction and better finish. Particularly efficient with low water pressure. Threaded for $\frac{3}{4}$ -in. standard hose couplings. Price, 50c.

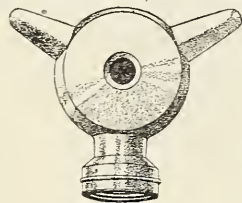
Imperial Lawn Sprinkler**Efficient in Operation**

Sprinkles uniformly over rectangular area. Unexcelled for parking or other narrow sections of lawn. Adjustable. Spray pipe may be rotated, throwing the jets to the right or left. Practical in construction. Made of galvanized steel pipe. Supporting standards made of heavy galvanized sheet steel. Provided with removable end cap allowing of ready cleaning.

No. 110. 7-foot length, $\frac{3}{8}$ -in. pipe with $\frac{3}{4}$ -in. standard hose connection; weight, 5 lbs. each. Price, \$3.00.

**Thompson "Fan"
Lawn Sprinkler**

Designed to furnish a sprinkler of the simplest possible design and highest serviceability. With this form of sprinkler its position can be changed without turning off the water, since the spray is thrown away from the sprinkler. Made of zinc, die cast. Price, 30c.

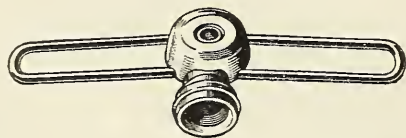
**Thompson
"Fountain"
Lawn Sprinkler**

Brass Lined

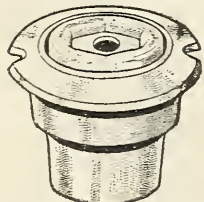
This sprinkler embodies the essential features found in the Twin Sprinkler with the addition of the fountain jet in the center. The spray is thoroughly broken up and distributed over an unusually large area. Made of zinc. Price, 50c.

**Thompson
"Peerless"
Lawn Sprinkler**

Brass Lined



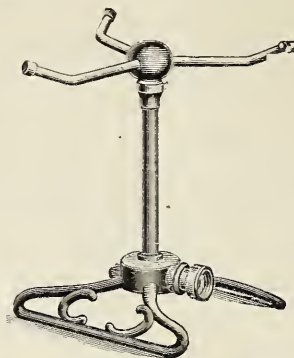
All that the name implies and meeting the insistent demand for a medium priced sprinkler that will not turn over when being moved about at the end of the hose. The 8-inch base made of No. 6 galvanized wire. Price, 50c.

**Thompson
Adjustable
Sprinkler Head**

The many superior features of this sprinkler head are directly the outgrowth of many years' experience in manu-

facturing various types of lawn sprinklers. There is positively no other sprinkler head on the market that can be so easily regulated; or which is so perfectly accessible when installed in the lawn. The sprinkler body is a die casting made of zinc. The nozzle is made of brass, accurate in every detail. A wrench is enclosed with each half dozen heads.

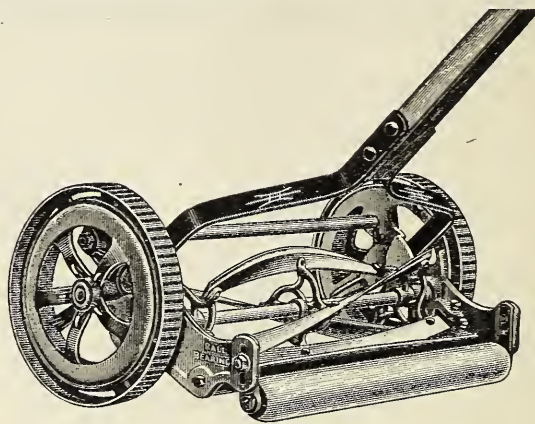
No. 115. Threaded for $\frac{1}{2}$ -in. standard pipe. Price, 85c each.

**Pluvius
Revolving Sprinkler**

Gives a fine spray, covering a very large circle, distributes the water evenly on the lawn. Base japanned finish. Head and arms, brass. Mounted on a sled. Price, \$2.75 each.

**LAWN MOWERS
(Baby Grand)**

An attractive light weight, ball-bearing mower. Suitable for owners of small lawns. Accurately fitted; strongly made and has full screw adjustment. Ball-bearing parts are automatically adjusted. All material is first-class. Cones are of tool steel, tempered glass hard. Four cutting blades of high quality knife steel ground under water.

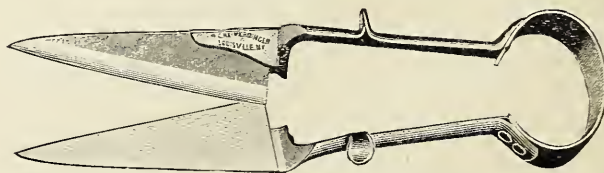


LAWN MOWER

Drive wheels, 8 inches; reel, $5\frac{1}{2}$ inches diameter. Finish, aluminum and gold; decorations, blue.

Size, inches.....	10	12	14	16
Each	\$10.50	\$10.75	\$11.25	\$11.75

GRASS CATCHERS—Galvanized steel bottom, heavy wire frame adjustable to mowers from 12-in. to 16-in. Price, \$2.00 each.

Grass Shears

GRASS SHEARS—Polished steel, raised handles. \$1.25 per pair.

GRASS SHEARS—Black iron handles, polished blades. 85c per pair.

Horticultural Tools and Supplies—(Continued)

Grass Hooks or Sickles

ATKINS PERFECTION—Made of finest steel. \$1.00 each.



Wooden Labels

For trees, pots and gardens.

		Painted	
	Wt.	Per	Per
	lbs.	100	1000
3½-in. copper wire Tree Labels.....	4¼ m	\$.40	\$3.10
4-in. Pot Labels	3¼ m	.25	2.25
5-in. Pot Labels	4 m	.30	2.90
6-in. Pot Labels	4½ m	.35	3.40

RAFFIA—Largely used by nurserymen and others and considered the best and cheapest material for tying known. Lb. 35c; in 10-lb. lots, 30c per lb.

In bale lots (224 lbs.) write for special Eastern prices.

MOSS—Selected Oregon. Lb. 20c.

GRAFTING WAX—¼-lb., 15c; ½-lb., 25c; 1b., 45c.

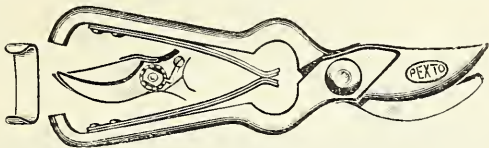
PRUNING COMPOUND—Used to seal bleeding limbs of trees after pruning. 1-qt. can, 55c.

PRUNING SHEARS

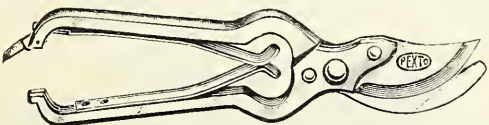
Pexto

The Pruning Shear is as necessary a tool as the hoe or rake. For the care of fruit trees, ornamental trees and shrubs, vines, flower bushes, hedges, etc., pruning shears are indispensable. Their specialized uses by florists and in orchards, vineyards, rice fields, etc., are many.

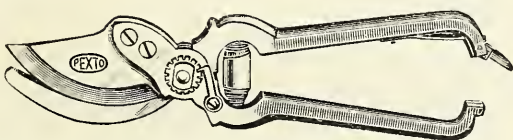
Every item shown is made on correct mechanical lines. The hooks and blades are so shaped (curved) as to insure easiest action. The blades have long bevel and are therefore easy-cutting. Yet PEXTO Pruning Shears cost you no more than the ordinary kinds.



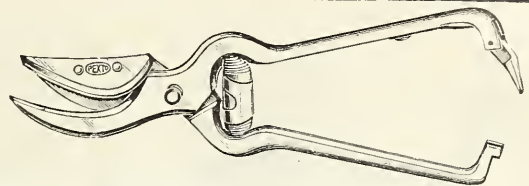
SWISS PATTERN—Full polished, best quality crucible steel blades, tempered, ground convex; adjusting nut and regulating ratchet; longitudinal double brass spring; removable handle-clip. No. R. 85, price, \$3.50.



CALIFORNIA PATTERN, with adjusting nut; polished tool steel blades of extra quality, tempered; longitudinal double brass spring. No. 60, \$2.00; No. 65, \$2.35; No. 165, \$2.40.



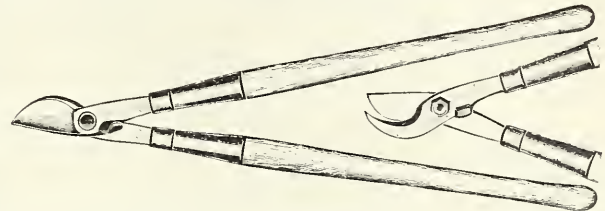
CALIFORNIA PATTERN, with adjusting nut; polished tool steel blades, tempered; volute spring. Nos. R. 275, \$3.25.



CALIFORNIA PATTERN—Black iron handles, polished steel blades, volute springs. \$1.50.

Orchard Pruning Shears

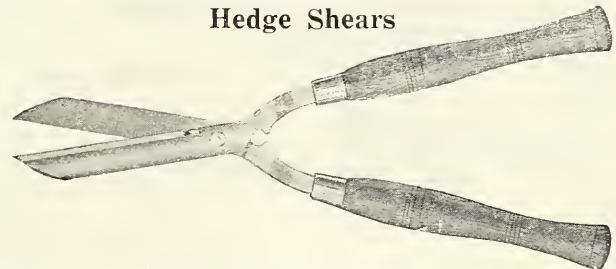
EXTRA HEAVY PRUNING SHEARS—Made in the Cart-right pattern, forged from high-grade tool steel and finely tempered. This is a much better shear than can be purchased at most stores. Per pair, 26-inch handles or 30-inch handles (weight 3¼ lbs.), \$3.50.



LONG HANDLE TREE PRUNERS, 6 ft., \$2.50; 8 ft., \$2.90; 10 ft., \$3.25.



Hedge Shears



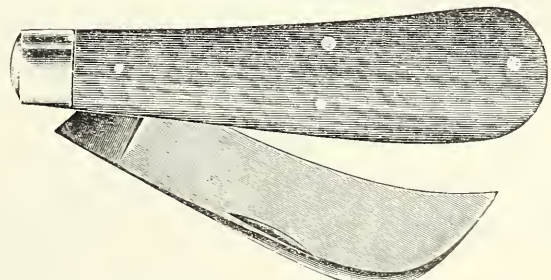
DISSTON—Polished crucible steel blades, hardwood handles, 8-inch blades (weight 2½ lbs.) Price, notched blades, \$3.50; plain, \$3.25.

Pruning Saws



NO. 3 DISSTON FOLDING PRUNING SAW—May be carried in the pocket. 9½-in. crucible steel blade. May be adjusted to different angles. \$1.50 each.

Pruning Knives



LARGE PRUNER—Curved handle, \$1.50. Budding knives, straight ivory handle, \$1.75 each.
GRAFTING KNIVES—\$1.75.



WATERING POTS—Galvanized—8-qt., \$1.50 each.

RUBBER PLANT SPRINKLERS—For indoor watering; angle neck (weight 9 ozs.): \$1.50 each.

TREE PROTECTORS

These are strips of thin wood, 7 inches wide, affording a perfect and necessary protection against sunburn and pests. Wet these before using to prevent cracking.

12-in. (weight 8½ lbs.): \$1.30 per 100; \$11.50 per 1000.

14-in. (weight 10 lbs.): \$1.35 per 100; \$12.50 per 1000.

16-in. (weight 11 lbs.): \$1.50 per 100; \$14.00 per 1000.

18-in. (weight 12 lbs.): \$1.70 per 100; \$15.50 per 1000.

24-in. (weight 19 lbs.): \$2.00 per 100; \$18.50 per 1000.

GARDEN TROWELS



All Steel, Good Strong Trowel, 50c each.



Primrose Trowel. Special, 15c.



Polished Steel, Hardwood Handle; extra strong. 85c each.



Narrow Steel Blade, Hardwood Handle, 25c each.



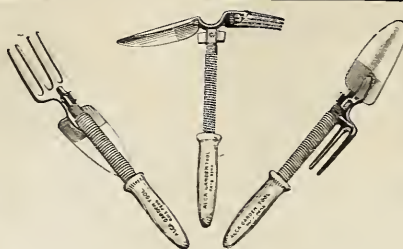
Gem. Malleable Tines. Black Wood Handle, 50c each.



Eureka Heavy Wire Prongs; Blackwood Handle. 50c each.



Floral Shovel. D. Handles 3-ft. 2-in. long over all. \$1.00 each.



Five-in-One Tool. 65c each. Postpaid.

Japanese Bamboo Lawn Rakes, 50c each.



Norcross Short Handle Cultivator, 75c each

GARDEN TOOLS

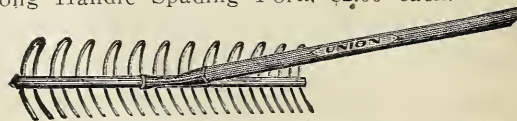
The Garden Tools listed below are of the best material and makes and should not be confused with inferior grades.



D Handle Spading Fork, \$2.00 each.



Long Handle Spading Fork, \$2.00 each.



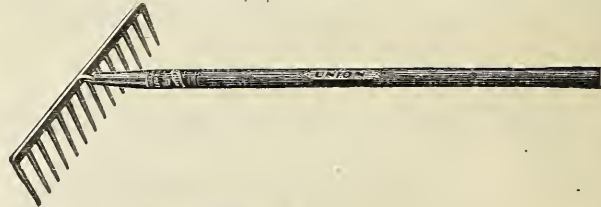
Wire Lawn Rake, \$1.00 each.



5-Prong Long Handle Cultivator, \$1.25 each.



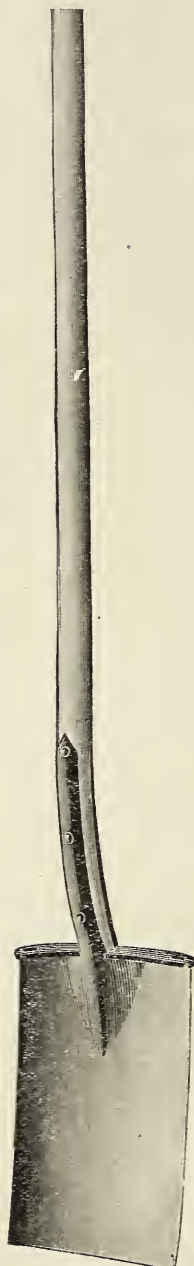
Round Bow Rake, \$1.25 each.



Straight Shank Rake, \$1.25 each.

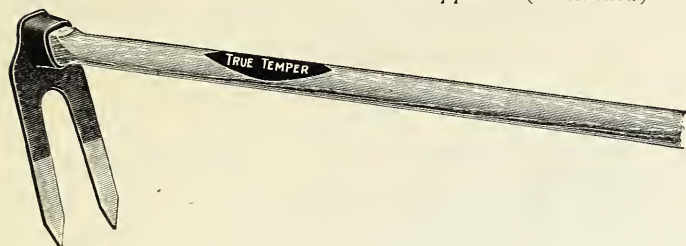


Long Handle Warren Hoe, \$1.25 each.
Short Handle Baby Warren Hoe, 75c each.

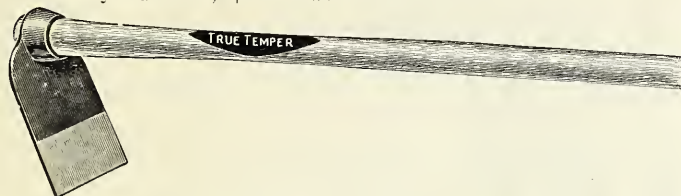


Long Handle Spade, \$2.00 each.

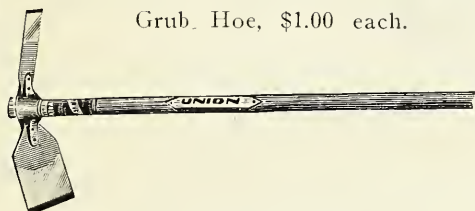
Horticultural Tools and Supplies—(Continued)



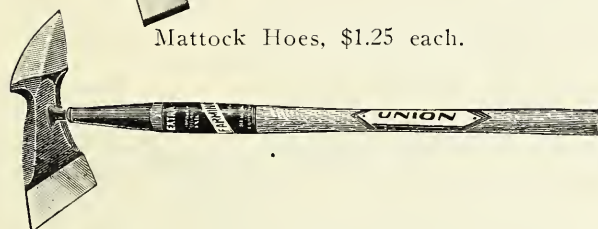
Vineyard Hoe, \$1.75 each.



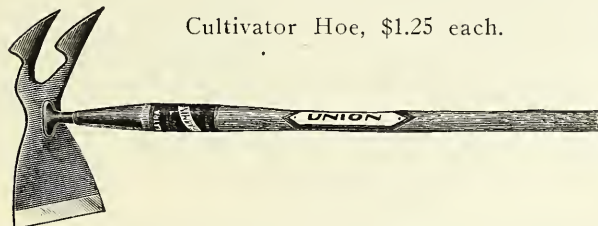
Grub Hoe, \$1.00 each.



Mattock Hoes, \$1.25 each.



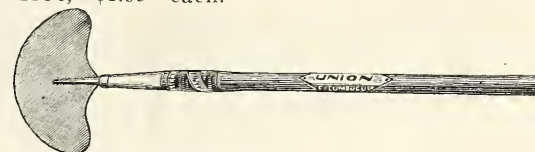
Cultivator Hoe, \$1.25 each.



Acme Weeding Hoe, \$1.40 each.



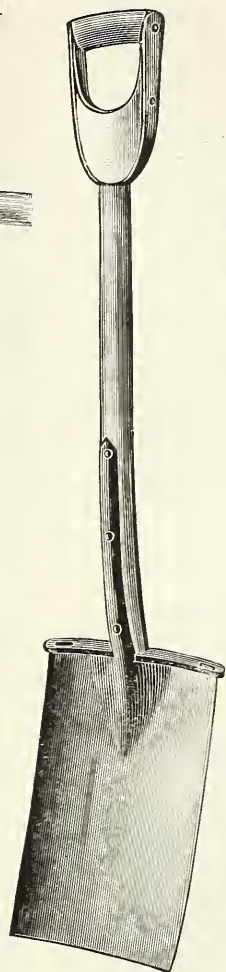
Scuffle Hoe, \$1.35 each.



Turf Edger, \$1.25 each.



Potato Hooks, \$1.50 each.



D Handle Spade, \$1.75 each.

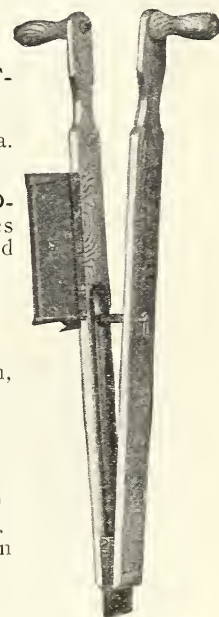
ACME HAND LEVER PLANTER—\$1.50 each.

POTATO PLANTER—Eureka. All metal, \$2.25 each.

CAHOON BROADCAST SEEDERS — (Improved). Handles all kinds of grass, clover and grain seeds, \$7.00 each.

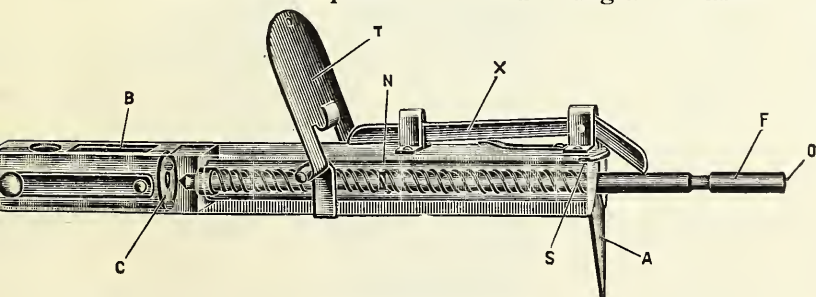
POSTHOLE DIGGERS—Split handle, \$2.80; Gibbs Pattern, \$3.50; Hercules, \$3.25; Champion, \$3.00.

"IWAN"—Most popular Soil Auger; steel jaws, iron rod, hardwood handles. 3-in., \$2.25 each; 4-in., \$3.00 each; 5-in., \$3.15 each; 6-in., \$3.30 each; 7-in., \$3.45 each; 8-in., \$3.60 each.



GOPHER TRAPS AND POISONS

The Never Fail Gopher Gun and Burglar Alarm



INSTRUCTIONS

First—Dig small opening in front of hole so that gun can be inserted in hole in position parallel to surface of ground. Then to load—open gun by tipping barrel (B) by pressing on same with thumb through oblong slot and insert .38 blank cartridge (C); close barrel.

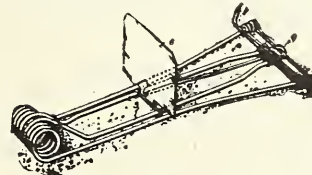
Place gun in gopher hole, press anchor plate (A) into ground to steady same, then see that trigger plate (T) is free and pull back firing pin (F) until trigger (X) engages

in notch (N). See that outer end (O) of firing pin (F) is free from ground.

As a burglar alarm it may be used in any way practicable. The best way is to place gun in any convenient place, attach thread to hole in trigger plate and string across room, keeping thread about one foot above floor. Anybody walking across floor and into the thread will set off the gun.

Bolt action may be removed by pulling out firing pin a little distance, then place thumb against anchor plate and disengage from notch in channel, lift out the bolt action in all and reassemble the same way.

Keep gun clean and it will last a lifetime. Price, \$1.75, postpaid. .38 caliber blank cartridges for "The Neverfail Gopher Gun," 25c doz. These cannot be sent by parcel post.



How to Catch a Gopher Macabee Gopher Trap

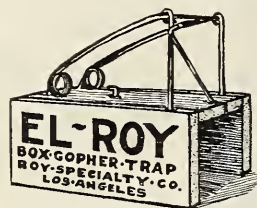
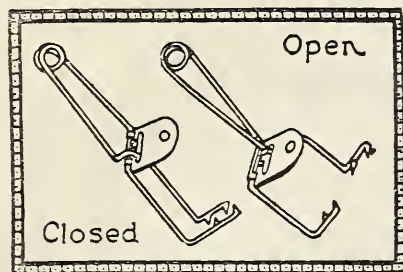
Directions for Setting—Place the end of each thumb on top of frame close to top of jaws; place the left index finger under the hook of trigger and raise the loose end of trigger up between frame (not over) against the top of

Horticultural Tools and Supplies—(Continued)

jaws, between the thumbs then press down with both thumbs until the top frame drops in the hook or trigger, then raise plate and insert end of trigger in the hole in plate. If the trap springs too hard, bend the end of trigger downward; if too easy, bend end of trigger upward.

Directions for Placing Trap—In setting trap for gopher find the last place the gopher has worked, and if hole is closed clean it out. Be sure the hole is straight, leaving just large enough to admit the trap its full length in the hole; cover the hole with grass or clod of dirt. Do not set trap so the jaws will come within one inch of a cross run. Do not try to catch gophers when the soil is muddy; you will not be successful. Keep the points of the jaws sharp. Price, 25c. Postpaid.

ROY GOPHER TRAP—A simple, easy set trap. Price, 25c. Postpaid.



EL ROY GOPHER TRAP—A box trap used in sandy soils. Price, 35c. Postpaid.

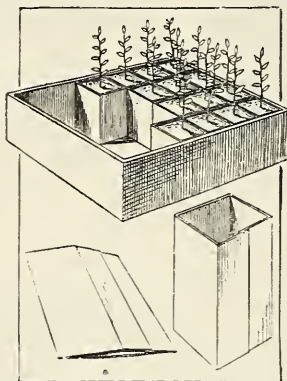
GOPHER BOMBS—Simply light with a match and roll down the hole. They burn freely and produce a powerful gas. Very effective. 40c doz.; 3 doz. for \$1.00; box of 125, \$2.75.

EL ROY POISONED GRAIN AND RAISINS—Eradicates gophers, squirrels, rats and mice. ½-lb. package, 35c.

MOLE TRAP—Reddick. No mole can safely pass under this trap. \$1.25 each.

The Expan Planting Pot

Made of heavy tar paper. Open top and bottom. For propagating plants, trees and shrubs—no waste space—no breakage. For the nurseryman, florist and market gardener. You can grow melons, squash, cantaloupes, cucumbers, etc., three weeks earlier in these pots than out in the open. When setting the plants in the field plant the pot and all, leaving about one inch above the top of the soil; this protects the tender plant from cut worms, wire worms, moles and field mice.



Size	Per 12	Per 100	Per 1000
3 x 4	20c	\$1.40	\$6.35
3 x 5	25c	1.50	7.35
3 x 6	30c	1.60	8.95

WIRE HANGING BASKETS—Copper finished, strongly made. 8-in., 25c each, \$2.25 doz.; 10-in., 30c each, \$3.25 doz.; 12-in., 40c each, \$4.00 doz.; 14-in., 50c each, \$4.50 doz.

WEED KILLER—Sure Shot. Kills morning glory, Johnson Grass, Bermuda Grass, etc. Spray directly on foliage. Quart, 85c; gallon, \$2.50; 5 gallons, \$12.50.

WATCH FOR "SPECIALS"

Customers should watch for our large seasonal ads. which we run in the leading S. F. newspapers.

UTILITY SPRAYERS, PUMPS AND DUSTERS

Knapsack Sprayer

Compressed Air Type

No. 10, Galvanized Tank
No. 15, Brass Tank



This type of sprayer is the most popular for all general work requiring a sprayer. It is adapted for spraying, white-washing, disinfecting, for the application of glue sizing, etc. The No. 10 tank is made of galvanized steel, the No. 15 of brass. Size, 7¼ by 20 inches; capacity, 3½ gallons. Side seam closely riveted and all joints well soldered and tested. Pump cylinder made of brass with bronze ball check valve, which will not deteriorate like rubber; hose, ½-inch, 5-ply, attached to tank by means of a standard hose connection of brass. Filling cap of ample size, easily removed without use of a wrench. Angle nozzle, automatic shut-off type, made of brass, our own design with extension feature, patented, equipped with strainer, fine, medium and coarse discs.

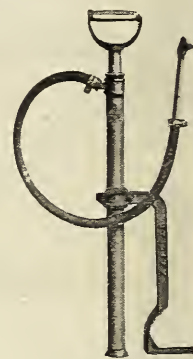
Packed one in a box. Shipping weight, 10 pounds.
No. 10, Galvanized, postpaid.....\$ 8.00
No. 15, Brass, postpaid.....12.50

Utility Bucket Pumps

All working parts of this pump that come in contact with spray solutions are brass. By removing variable disc a straight stream can be had for washing windows, automobiles, etc., in addition to general spray purposes.

This is a double action pump, the air chamber being provided by the hollow plunger rod of ¾-inch tubing. Body of pump is 1¼ by 19 inches, made of heavy seamless brass tubing. Pump is equipped with 2 feet of ½-inch, 5-ply hose and 12 inches of ¾-inch pipe and our No. 80 angle service nozzle. The brass parts are highly polished and lacquered; the handle and foot rest are painted a rich carmine red.

Packed one in a corrugated fibre box. Length over all, 24 inches. Shipping weight, 6 pounds. Price, \$5.50 each.



Utility Two-Wheel Portable

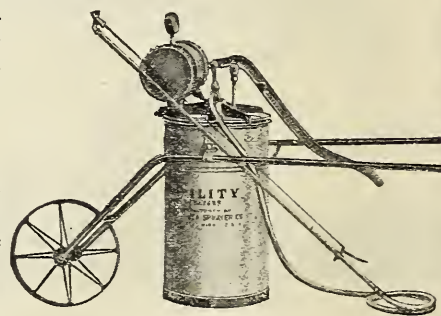
For size and construction, this outfit is the same as our Nos. 40 and 40-A. with the exception of the air pressure tank and the cart.

When tank is mounted, as shown below, it is easily moved about by one hand, which leaves the other free for directing the spray. The steel frame is but 18 inches wide, permitting its use in greenhouses and other places where the passageways are narrow.

The air pressure tank, which is securely mounted on the spider pump casting, is so constructed that a sufficient pressure may be attained and considerable spraying done with one pumping. Tank is supplied with pressure gauge and drain plug.

These outfits are not only adapted for spraying, but for heavy disinfectants, whitewash, cold water paints, kalsomine and other mixtures of similar nature.

No. 85-A, as shown. Weight, crated, 110 pounds; price, \$55.00.



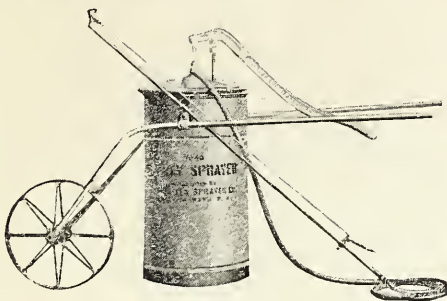
Horticultural Tools and Supplies—(Continued)

Utility One Wheel Portable

A very useful and convenient outfit where the nature of the work necessitates the moving about of a large amount of liquid.

Tank, 18-gallon capacity, made of heavy galvanized iron, reinforced at top and bottom with heavy iron bands. A standard UTILITY Pump with 2-inch air chamber, 23 inches long, fastened to the top of tank by a spider casting removes all the liquid. Frame made of steel tubing, well braced, to insure strength and rigidity. Tank when filled hangs in a vertical position and is easily removed. Wheels 18-inch diameter by 2½-inch face. This outfit can be had with pressure tank, as described on following page. Equipment, 10 feet of ½-inch, 5-ply hose, 4 feet spray rod, and No. 65 shut-off nozzle.

No. 40, as shown above. Weight, crated, 85 pounds. Price, \$39.00.



No. 40

Utility Horizontal Barrel Pumps

This unit is very desirable for spraying orchards, etc., and on hill-sides where the ground is uneven. The barrel is hardwood and securely fastened to skid with two steel rods. The entire outfit is assembled in a rigid manner and well painted. Standard UTILITY Pump with 2-by 28-inch air chamber, 10 feet of ½-inch, 5-ply spray hose; 4 feet of spray rod and shut-off nozzles makes up the equipment.

Shipping weight, crated, 140 lbs. Price, \$37.50.



No. 180A.

Utility One Gallon Sprayer

No. 185
Galv.
Tank



No. 190
Brass
Tank

Most convenient size compressed air type sprayer ever put on the market. Especially adapted for sanitary work, disinfecting, etc. Tank, 6¼ inches in diameter by 8½ inches high. Same in design as the No. 10 tank. The pump cylinder is of heavy brass tubing, 1¼ inches in diameter, has a brass ball check valve enclosed in a brass cage. Pump plunger made of No. 1 leather; filling cap of ample size provided, eliminating use of funnel in filling. Cap easily removed without the use of a wrench. The dis-

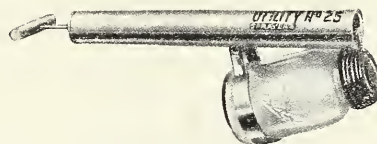
charge is through a ¼-inch galvanized iron pipe from center of tank when in horizontal position. The nozzle is the self-closing type made of brass, provided with strainer, and is not affected by chemicals.

Packed one in a carton. Shipping weight, 9 pounds. No. 185. Price, \$5.00.

REMEMBER

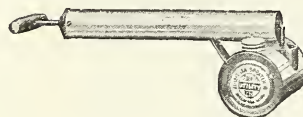
Large returns from a small investment is a substantiation of your good judgment in buying UTILITY SPRAYERS.

Hand Sprayers



No. 25. 1-Quart
Glass Jar

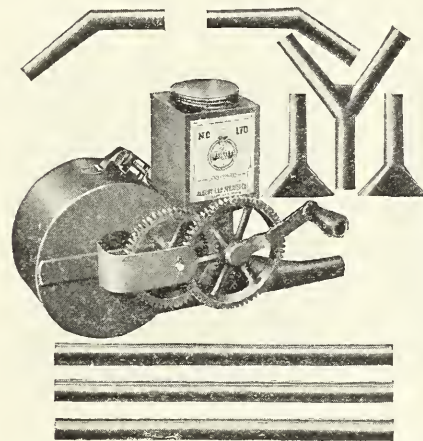
Adapted for small gardens, plants, flowers, disinfecting, etc. Pump cylinders are 1¼ by 14½ inches in size. Packed separately in boxes which prevents breakage. Price, \$1.10.



Tin Sprayers

No. 125. 1-Pint, 40c.

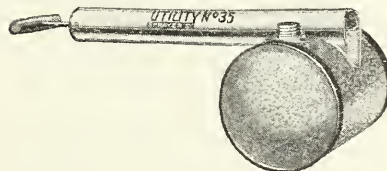
Utility Duster No. 170



Used for the application, in dry form, of spray chemicals, as Arsenate of Calcium, Arsenate of Lead, Paris Green, etc. Made of heavy tin enameled red; iron and brass machined cut gears used throughout, and so arranged as to give a steady and uniform delivery. Fan is 3½ by 6½ inches, larger than on other dusters of similar construction. The hopper holds more than a quart. The position of feed valve in bottom of supply hopper is shown by indicator on fan box.

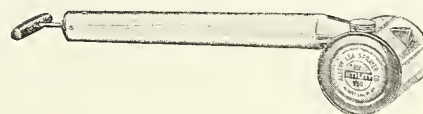
The duster, exclusive of the tubes, is 14 inches long, 6 inches wide, and 9½ inches high; it weighs with complete equipment about 6 pounds. It is provided with three 1-inch by 14-inch tubes, two 45-degree and one Y, or two-way, connection and two large nozzles with wide spread, and an adjustable carrying strap. All joints in the pipe line lock securely, no loose joints as on other makes of dusters.

Packed one in a carton. Shipping weight, 8 pounds. \$10.50 each.



No. 35. 3-Quart
Galvanized Tank

Made of galvanized steel; tank, 5½ by 6 inches long; all seams soldered. Large filling hole. For general spraying it has no equal. Throws forceful and wide spray. \$1.25 each.

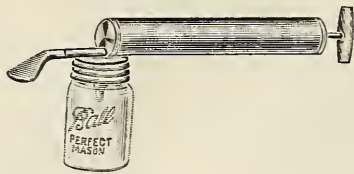


No. 130

Made of best quality heavy tin. Large filling hole with cork lined cap. Discharge tube protected by shield. 1-quart, 60 cents each.

Lowell Powder Duster

Easy to operate. Fill reservoir with dry powder, such as Paris Green, Hellebore, powdered Arsenate of Lead, etc. Size of spray regulated by operation of plunger. Elbow reversible, enabling operator to spray up or down. Pump cylinder, 1 $\frac{1}{4}$ inches diameter, 14 inches long; length over all, 21 $\frac{1}{2}$ inches; reservoir, one-pint Mason Fruit Jar. Price, \$1.00 each.



SPRAYING FACTS

The United States Department of Agriculture reports the annual loss by insect depredation to be about 35% of the gross returns of both your orchard and your farm. This loss can be reduced at least 75% by an expenditure of from 1% to 2% of the value of your crop by proper and timely spraying to keep from your plants two classes of enemies, insects and fungi. Much time and money can be saved by the proper selection of a machine and spray materials, and a few simple rules.

Be sure of the cause of your trouble.

Use the best known remedies.

Be sure your spraying material is thoroughly mixed according to directions.

Spray at the proper time.

Spray thoroughly so that every part of the plant is covered.

Don't spray before or just after a shower, or when there has been a heavy dew.

Don't fail to understand thoroughly the nature of the insect you wish to control.

For all general purposes insects may be classed into two principal groups, which is all that is necessary to start along the right line of study.

First: Chewing insects, such as the potato beetle, the different caterpillars, etc., which bite off and eat exposed portions of the plant. These are usually controlled by applying poisons, such as Paris Green, Arsenate of Lead, Hellebore, etc.

Second: Sucking insects, such as plant lice, scale insects, aphids, red spider, the squash stink bug, etc. These insects suck the sap of the plant, after having punctured the exposed tissues. This group of insects can only be controlled by the application of a contact spray of a greasy, oily or caustic character, and they must be directly hit and covered so as to clog up the breathing pores of the body.

As there is danger of injuring tree or plants by either using the wrong material or by careless mixing, we suggest that when in doubt, one should consult someone competent to give information.

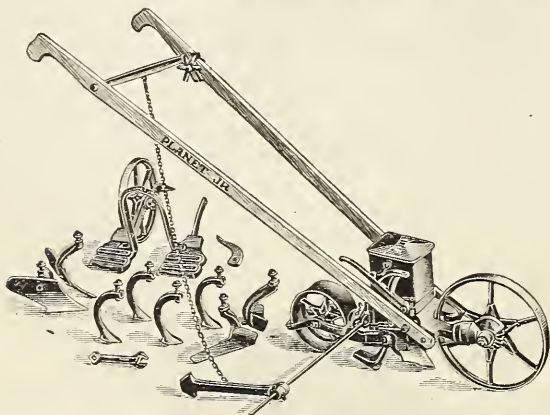
Insecticides are best applied as a spray, the more force the greater the effective results. Keep the bugs from once getting a start. Spray early for best results.

FARM IMPLEMENTS AND SUPPLIES

We handle a complete line of Agricultural Implements and are in a position to quote lowest prices on high grade goods. If in the market write or call at our store for prices. Prices subject to change.

PLANET JR. CULTIVATORS AND SEEDERS

NO. 25. Planet Jr. COMBINED HILL AND DRILL SEEDER—Double and Single Wheel Hoe, Cultivator and Plow. Holds 2 $\frac{1}{2}$ quarts. Weight, complete, 61 lbs. It combines in a most practical way the Planet Jr. No. 4 Drill and No. 12 Double and Single Wheel Hoe. Equipment: One pair of 6-inch hoes; four cultivator teeth; one pair plows; two leaf guards; one marker; all oil tempered.



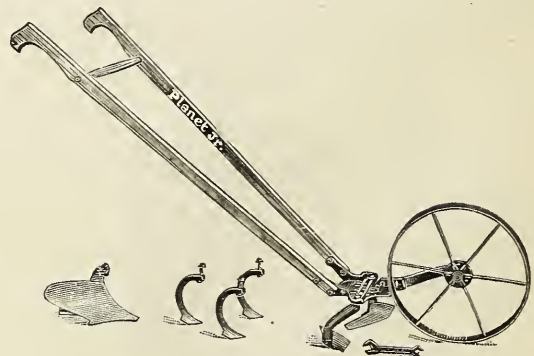
No. 25 Combined Seeder, Double and Single Wheel Hoe is valuable for gardeners who have enough acreage for a double-wheel hoe to be used, and yet prefer not to buy seeders and wheel hoes separately; also for onion growers and for the large family garden where both a single and double-wheel hoe can be used to advantage. The hopper holds four pounds of onion seed.

As a seeder it is practically the same as the Planet Jr. No. 4. It sows in drills or drops in hills, 4, 6, 8, 12 or 24 inches apart; has the same feed, hill-dropping mechanism and automatic device for stopping the feed, and also a capital seed index.

It is thoroughly substantial and accurate in planting.

Its simplicity, both as a seeder and as a wheel hoe, makes the combination thoroughly satisfactory. Price, complete, \$24.00.

NO. 17. PLANET JR. SINGLE WHEEL HOE—Equipment: One pair of 6-in. hoes; three steel cultivator teeth; one large garden plow; all oil tempered. Steel frame; 15-in. steel wheel. Packed weight, 24 lbs.



No. 17 is identical with No. 16, except in equipment, and all that has been said previously regarding Planet Jr. wheel hoes is equally true of No. 17. The three sets of attachments which go with it are all the finest of their kind, and make an outfit sufficient for most garden work. You can do more and better work with it in one day than you can do in several days with the old-fashioned hand hoe.

The hoes exchange sides to work to or from the row, and change of wheel regulates the depth. The hoes are constantly useful throughout the season.

The cultivating teeth are oil tempered and work admirably, are changeable for pitch and are useful for marking out rows. Price, \$9.25.

FARM IMPLEMENTS AND SUPPLIES

E. A. Jeanes, Jr., Ballinger, Texas, writes February 26, 1920: "I have the Planet Jr. Hill and Drill Seeder, also the little, two-wheel hoe, which has been in the family for some twenty years. I have never seen half their equal, and I would be worse than a baby in the garden without the Planet Jr."

James Preston, Elkton, Md., writes May 28, 1920: "I am cultivating a garden four times larger with this hoe (No. 25 Seeder) than I did last year by hand and not working as hard at it."

Grant Van Meter, Lafayette, Ind., writes: July 18, 1919, in reference to No. 25: "Think it great, and would not be without it now for twice the price."

Complete Catalog, including Potato Diggers, Celery Hillers, Beet and Orchard Cultivators, etc., sent free.

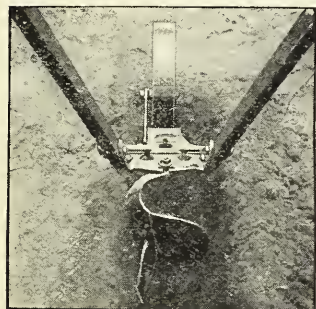
NO. 119. PLANET JR. GARDEN PLOW AND CULTIVATOR—Equipment: One 1¼-inch cultivating tooth; one 4-inch cultivating tooth; one plow; one reversible scuffle blade. Weight, 16½ lbs. 24" steel wheel. We can also furnish a special double moldboard plow which can be used on this machine.

THIS NEW MEMBER of the "Planet Jr." family will appeal to all those who prefer a high wheel tool for their garden work. Where the soil has not been so thoroughly and carefully prepared, the high wheel undoubtedly makes an easy running tool. The wheel is 24" in diameter with a rim 1½" wide, insuring easy running in the lightest soil. The equipment is so complete that it will meet all the needs of the ordinary garden, where the adjustments and refinements of the higher priced Wheel Hoes are not required. Price, \$5.50.

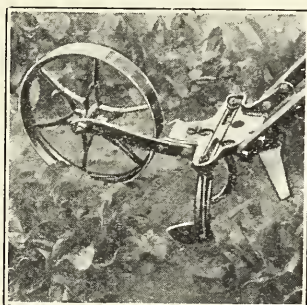


DAVID FOX, 30 Church St., New York City, N. Y., writes June 11, 1920: "Am using one of your old No. 2 Planters, a hand cultivator, with a dozen or more tools, and a horse cultivator. Our garden, which is a large one, would be impossible without your tools."

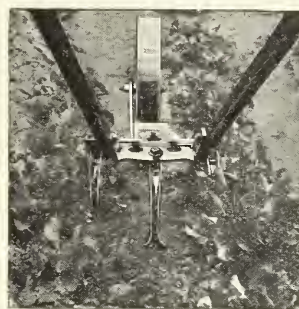
L. F. DERKIN, Montesano, Wash., writes March 26, 1920: "I could buy a hoe for one-third of the money, but I consider your tools worth four times more than theirs, in fact, I would rather not use them at all."



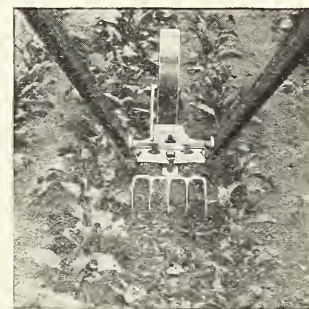
PLOWING



WEEDING



CULTIVATING



7-IN. CULTIVATING RAKE

A. N. CHIVERON, Mt. Vernon, Ill., writes April 28, 1920: "The Planet Jr. tools are best of all. I have a Drill, Hand Wheel Hoe and two Horse Hoes."

Planet Jr. Horse Hoes are more widely known and bear a higher reputation than any horse hoes ever made. Their first appearance was hailed with delight by thrifty farmers, and they have been held in increasing esteem ever since by those who have learned their strength and other merits, by use. The various tools are the result of a thorough knowledge of both farming and manufacturing, and naturally they have attracted the attention of brother farmers throughout the world. We ask you to study this part of the catalogue well and to write us when in doubt what is best for your purpose.

The new steel gauge wheel, having no spokes, will not clog with cornstalks, stones or other trash, and no sand or dirt can be carried up on the inside of the rim to drop on the bearings. The hub is cheaply renewed when necessary. This wheel fits all Planet Jr. Horse Hoes or Harrows. When ordering extra wheels, specify for which machine wanted, as the arms vary. Cast wheels can be supplied if wanted.

With lever and wheel, Price, \$21.00.

MRS. GEORGE ZIESKE, Britton, Mich., writes June 2, 1920: "I have an acre for garden and expect to take care of it myself with the help of Planet, Jr."

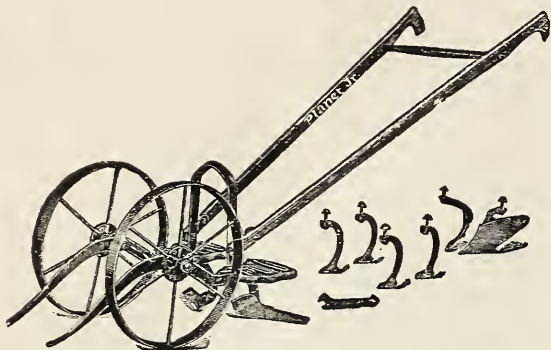
ONE HORSE IMPLEMENTS



No. 8 Planet Jr. Horse Hoe and Cultivator.

FARM IMPLEMENTS AND SUPPLIES

NO. 12. PLANET JR. DOUBLE AND SINGLE WHEEL HOE COMBINED—Equipment: One pair of 6-in. hoes; four steel cultivator teeth; one pair of plows; two leaf lifters; all oil tempered. Steel frame; steel wheels. Packed weight, 33 lbs.



The No. 12 is the most popular Double Wheel Hoe we make. It can be used by man, woman or boy. It is identical with No. 11 except that the 4½-inch hoes and the rakes are omitted from the equipment, and it is sold at a correspondingly less price. The attachments with it are what gardeners use most, and the short hoes, rakes, and any of the attachments can be added at any time. You'll be astonished how easy it is to save time, labor, money, and get bigger crops if you use it. Price, \$14.75.

PONY PLOW, WOOD BEAM

7-inch	\$ 9.00
8-inch	10.00
10-inch	14.50

PONY STEEL BEAM

7-inch	\$13.00
Furnished with extra share.	

SOUTH BEND PLOWS General Purpose Wood Beam

7-inch	\$21.00
8-inch	23.50
9-inch	26.50
10-inch	27.50
12-inch	32.00

Furnished with extra share.

SOUTH BEND CULTIVATORS

5-tooth with lever	\$10.25
7-tooth with lever	12.50

CALIFORNIA GIANT CULTIVATOR

9-tooth plain	\$17.00
9-tooth with wheel	18.50

HARROWS

14-tooth with lever	\$11.00
Peg Harrows, 25-tooth	14.75
Peg Harrows, 50-tooth	31.75
Peg Harrows, 75-tooth	49.50
Peg Harrows, 100-tooth	67.50

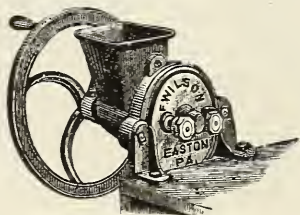
WOODS SPRING TOOTH HARROW

9-tooth with handles	\$26.50
12-tooth with handles	31.50

WILSONS POULTERERS

This mill will grind or granulate dry bones, oyster and clam shells, grit, gravel stones, old crockery, glass, charcoal, corn and all sorts of grain.

The grinding surfaces are built of the hardest material obtainable, and will last for years. The general construction of the mill is very durable, and should last a life time.

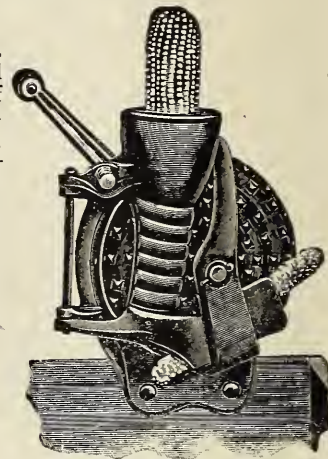
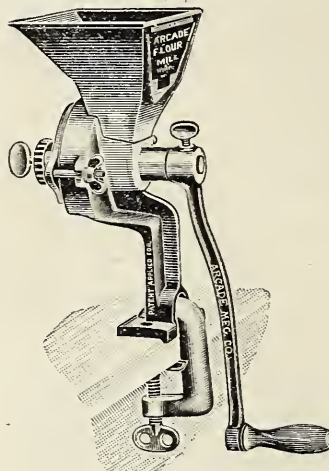


able, and should last a life time. Set on a heavy iron stand that can be fastened to a table or bench. Diameter of hand wheel is 20 inches. Size of hopper, 2½x3¼x4 inches. Price, \$10.00.

HAND CORN SHELLERS

IRON KING

The Iron King is a simple, strong and cheap sheller and will shell the largest ear of field or pop corn. It is adjustable to different size ears. Capacity 6 to 8 bushels per hour. Price, \$2.25.



ARCADE GRIST MILL

Grinds all sorts of grain from consistency of finest flour to cracked corn. Fits on table. Complete, \$4.75.

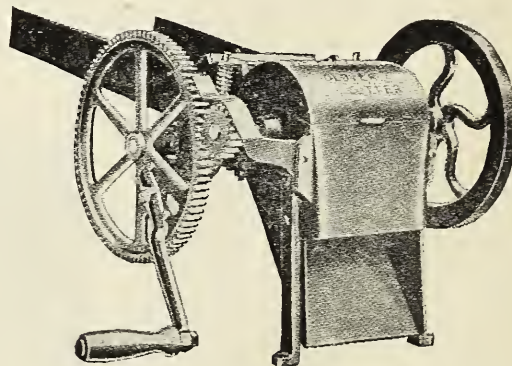
BANNER ROOT CUTTER

Cuts Beet, Carrot, Turnip and other roots in ribbon-like strips. Weight, 44 lbs. Price, \$9.00.

MANN'S GREEN BONE CUTTER

No. 5 C with Crank Handle	\$14.25
No. 5 B with Fly Wheel	19.75

CLOVER CUTTER



It is arranged to cut ½-inch lengths and will handle perfectly clover, alfalfa, vegetable tops, or any kind of hay or straw, either green or dry. Originally designed for cutting feed for poultry, but can be used equally well for any other like purposes. The machine is constructed entirely of iron and steel. It is designed to be fitted on a table or other similar structure. The cutting apparatus consists of four 7-inch adjustable spiral steel knives and an adjustable shear plate, making it possible to set the knives as close as a pair of scissors. Cutter knives can readily be removed for sharpening. Length over all, 30 inches.

No. NR—Weight, 60 lbs. Each, \$25.65

WE CARRY MANY IMPLEMENTS NOT LISTED IN THIS CATALOG. IF IN THE MARKET WRITE FOR PRICES

CIDER MILLS

These mills crush all kinds of fruit such as apples, grapes, berries, etc. Made in four sizes.

Bantam Single Tub, weight, 113 lbs.....	\$32.75
Junior Double Tub, weight, 172 lbs.....	48.75
Medium Double Tub, weight, 251 lbs.....	60.50
Senior Double Tub, weight, 367 lbs.....	77.50

PARKER FRUIT PRESS

A family size for crushing berries, grapes, etc. All metal; has a compound leverage producing 1500 lbs. pressure. Price, \$17.50.

WHEELBARROWS

Ataboy Baro—A steel barrow, indispensable about garden or farm. Each, \$7.50.

INSECTICIDES

The following cannot be sent by mail, except where noted, but must go by express or freight.
POISONS ARE NOT MAILABLE

NICO FUME LIQUID

(Not Mailable)

"NICO-FUME" LIQUID is a highly refined solution of "free" nicotine, guaranteed under the National Insecticide Act to contain 40 per cent. of nicotine. For Spraying, one or two teaspoonfuls to the gallon of water furnish an effective remedy against Green Aphis and Thrips; and for Vaporizing, one-half ounce per 2,000 cubic feet furnishes a strong fumigation. "Nico-Fume" Liquid thus has the advantage of being employed both for spraying and for fumigating. The labels contain complete directions. 4-lb. can, \$8.50; 8-lb. can, \$16.50.

**"BLACK LEAF"**

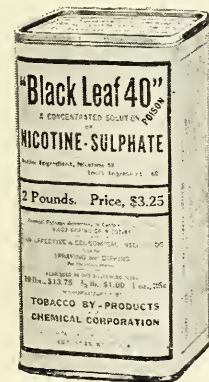
(Not Mailable)

FOR SPRAYING PURPOSES

"Black Leaf 40" is highly recommended by Experiment Stations and by Spraying Experts throughout the entire United States and the Dominion of Canada.

"Black Leaf 40" is perfectly soluble in water; no clogging of nozzles.

One part of "Black Leaf 40" is usually diluted as follows: With about 800 parts of water for Black Aphis and



Woolly Aphis; with about 1000 parts of water for Green Aphis, Rosy Aphis, Pear Psylla, etc.; with about 1200 parts of water for Onion Thrips; and with about 1600 parts of water for Grape Leaf-Hopper; when prepared according to the directions on the labels.

Owing to the large dilution, neither foliage nor fruit is stained.

If desired, "Black Leaf 40" may be used in combination with Arsenate of Lead, Lime-Sulphur, and Bordeaux Mixture—thereby saving the labor and expense of making separate applications. For more detailed information see our special spraying leaflets.

FOR DIPPING PURPOSES

For Dipping Sheep and Cattle—To destroy scabies: The 10-lb. tin of "Black Leaf 40" will produce 9600 gallons (U. S. Measure) of dipping solution. The resulting mixture contains fully "5/100 of 1% nicotine," the strength required by the U. S. Government in Official Dippings of sheep and cattle for scabies; for which purpose the U. S. Government permits only two classes of dips, namely, nicotine and lime-sulphur. However, lime-sulphur, although effective against scabies, does not destroy ticks and lice on sheep nor lice on cattle—whereas "Black Leaf 40" is effective against all of these pests when used per specific dipping directions on the labels.

"Non-Poisonous"—Diluted in accordance with directions.

"Black Leaf 40" is classed as a non-poisonous dip to the animals specified.

"Black Leaf 40" does not stain nor injure wool at the dilution given. Owing to its concentrated nature, "Black Leaf 40" is especially desirable to handle from the standpoint of transportation—one case of ten 10-lb. tins, gross weight less than 150 lbs., being sufficient to produce 9600 gallons of Official Strength swim, for sheep and cattle scabies. 1-oz. bottle, 35c; 1/2-lb. can, \$1.25; 2-lb. can, \$3.75; 10-lb. can, \$15.50.

APHINE

APHINE—The Insecticide that kills plant lice of many species, is a most effective remedy for all sap sucking insects, as the green, black and white fly (the aphis), thrips, soft scale, and such soft bodied leaf eating insects as the currant and cabbage slugs. Aphine can be safely applied to all flower, fruit and vegetable plants. Aphine is a concentrated liquid, mixing readily with water and is applied at various strengths as per directions on each can. Aphine is free of the disagreeable odors and objectionable features contained in other insecticides and meets the requirements of the gardener for both house and garden. For roses, sweet peas, chrysanthemums and all greenhouse and outdoor flowering plants you will find Aphine a most effective remedy against the insects which infest them. Aphine is unexcelled as a wash for decorative foliage plants. Aphine is a carefully prepared insecticide against all plant lice or aphids, and all sucking insects; white fly, red spider, etc. 1/4-pint can, 30c; 1/2-pint, 50c; 1 pint, 80c; 1 quart, \$1.25; 1 gallon, \$3.00.

ATOMIC SULPHUR—Finely ground sulphur in water. The best article to spray to kill the red spider. 2-lb. bottle, 50c. Get prices on larger quantities.

FISH OIL SOAP—Much of the whale oil soap, so-called, is really fish oil soap, now properly labeled. Mild scalecide and insecticide may be used on palms and ferns. Postage additional. Cakes of about 1 lb., 20c.

KEROSENE EMULSION—Ready for use; will kill scale, green lice and other pests that suck; makes 25 gallons of spray. 1-quart cans, 45c; 1-gallon cans, \$1.25.

FUNGINE is a concentrated liquid sulphur composition, readily soluble in water, free of all sediment, and, unlike Bordeaux mixture and lime and sulphur, does not stain the foliage when applied, but cleanses it—which is most desirable in garden and greenhouse use. Fungine is a most efficient remedy for the control of mildew, rust and various other fungi affecting flowers, fruits and vegetables, and is proving very successful as a preventative remedy for young plants against different blights to which they are subjected. For mildew on roses, sweet peas, chrysanthemums and other plants (flower, fruit or vegetable), rust on chrysanthemum and carnations, Fungine is most effective. Applied to celery plants, at regular intervals of a week or ten days from early growth, Fungine will be found an excellent preventative against rust; also against rust affecting Antirrhinum which is so difficult to combat. One gallon Fungine makes fifty gallons spraying material. Half pint, 50c; pint, 75c.

INSECTICIDES continued

SHERWIN-WILLIAMS SPRAY PRODUCTS



Sound Fruit Brings Big Prices

But you cannot have sound, healthy fruit without the use of proper spray materials.

**SHERWIN-WILLIAMS
DRY LIME-SULFUR**

Standard Lime-Sulfur Solution in Dry Powdered Form

Will insure you large fancy fruit that brings good prices. Use it as a dormant spray against the scale and combine it with your Arsenate of Lead for summer spraying. Come in and let us tell you more about Dry Lime-Sulfur and let us quote you prices.

1 lb. 40c, 5 lbs. \$1.35 larger quantities price on application



FUNGI-BORDO

It is no longer necessary to go to the trouble of making up your own Bordeaux Mixture, neither is it necessary to handle the heavy paste Bordeaux Mixture. Use

**SHERWIN-WILLIAMS
FUNGI-BORDO**

A True Bordeaux Mixture in Dry Powdered Form

It does not deteriorate like the paste Bordeaux Mixtures and you always have a fresh mixture for each spraying, insuring good results.

Come in and let us talk over your spraying material requirements. We have some good literature on spraying that is yours for the asking.

1 lb. 50c, 5 lbs. \$1.75, larger quantities price on application

Sound Fruit Brings Profit

You cannot afford to experiment with spray materials this year. Use one that has proven by years of use to be successful.

**SHERWIN-WILLIAMS
DRY ARSENATE OF LEAD**

Has been the standard of quality for years. It has maximum killing strength, yet no danger of burning and will insure you the big healthy fruit that you want. Ask us for literature and prices.

1/2 lb. 40c, 1 lb. 60c, larger quantities price on application

POTATOES OR BUGS

You cannot have both and to protect yourself against the potato bug and to insure a good crop, spray early and thoroughly with

**SHERWIN-WILLIAMS
PARIS GREEN**

the most widely used and best known Paris Green in the United States. It has been the standard of quality for years. You take no chances when you use Sherwin-Williams Paris Green.

Stop at our store for literature and prices on Insecticides.

1/4 lb. 30c, 1 lb. 70c, larger quantities price on application

Protect Your Crops

Not only against insects but against disease as well. Use

**SHERWIN-WILLIAMS
PESTROY**

A Combination of Arsenate of Lead and Bordeaux Mixture in Dry Powdered Form

This spray has the killing power of Arsenate of Lead and the fungus preventive qualities of Bordeaux Mixture. It sticks to the leaves and makes big healthy fruit. When used according to directions, a spray solution will be secured containing approximately 1-1/3 pounds of Arsenate of Lead and the standard 4-4/50 Bordeaux Mixture formula.

1 lb. 50c, larger quantities price on application

INSECTICIDES

PREPARED CASEIN SPREADER

A Golden State Product



Convenient to use. Can be added in dry form to spray material in the tank and requires no cooking.

Makes possible covering more trees with same amount of spray material, reduces worm infestation and does not cause burning or toxicity.

Is compatible with all spray combinations, possesses excellent wetting and adhesive properties and eliminates objectionable blotchiness on mature fruit.

An inexpensive spreader for foliage and cover sprays, pleasant to use and recommended by leading entomologists and horticulturists.

Quantity to Use and Price—Two heaping tablespoonfuls for each 10 gallons or 1½ lbs. for each 200 gallons of diluted spray.

Sacks, paper lined, of 100 lbs., per lb. .20
Cartons holding 1½ lbs. .65

Note—Each carton contains enough spreader for a 200-gallon tank of spray and a measure holding 1½ lbs. is packed in each sack.

REMEMBER—All spray solutions should be applied with force to be effective. Our Utility Sprayer No. 10 is just the thing and only costs \$8.00, postpaid. One of these sprayers will outlast cheap tin ones and save you a great deal of unnecessary work.

MAGOTITE—Destroys worms, maggots and grubs. 2 lbs., 35c; by mail, 45c; 4 lbs., 65c; by mail, 75c.

WHY RAISE ROSES TO FEED BUGS?



MELROSINE—The only remedy—endorsed by leading authorities. The **General Contact Insecticide** that **Kills Rosebugs** and other insects. Used with any good spray-pump, diluted with from 20 to 25 parts of water. Pleasant and harmless to use. Guaranteed effective when used according to directions on can. By mail or express at customer's expense. Or Trial Size, sufficient to make one gallon when diluted, and care for several plants for the season. **Melrosine—It Kills Rosebugs.** Trial size, 60c; pint, \$1.10; quart, \$1.85.

SLUG-SHOT—Destroys all insects injurious to house and garden plants, vegetables, and fruits of all kinds—slugs, caterpillars, etc., also poultry lice; as effective as Paris Green without the danger from poison. Mailable. 5-lb. package, 85c.

ZENO—Miscible oil spray for orchard spraying. Gallon, \$1.50.

QUA-SUL—For Mildew, Rust, Blight, Curl Leaf, etc. Cleans soil and plants from eggs of pests and Spores of Fungus. The greatest Germicide and Fungicide known. Trial size, 25c; quarts, \$1.00. Supplied in cases and drums. Send for circular.

REX LIME AND SULPHUR for dormant spraying. 1-gallon cans, \$1.00 each. Write for prices on larger quantities.

SULPHO TOBACCO SOAP—(Mailable.) A wonderful insect and bug exterminator. 3-oz. cake (makes 1½ gallons prepared solution), 10c; 8-oz. cake (makes 4 gallons prepared solution), 20c.

TOBACCO DUST—The most economical form to use tobacco as an insecticide; fatal to green and black fly and similar garden pests, by simply dusting over the plants. Lb., 15c; 10 lbs., \$1.00; 100 lbs., \$6.75.

TOBACCO STEMS—in bales of about 50 lbs., at 4c per lb.

SHRADER'S ANT POWDER—Not a poison. The most effective ant destroyer on the market today. 25c, 50c, \$1.00.

LEINANS SLUG GO—A very good slug destroyer. Per pkg., 35c.

LEINANS SOWBUG GO—Kills the sow bugs. 50c.

LEINANS MILDEW GO—For Mildew. 35c.

LEINANS RAT GO—Kills rats and mice. 35c.



GAS BALL RODENT

KILLER is a ball which when lighted and rolled down into the burrow, pours forth a deadly poisonous gas that carries death to any living thing in the burrow. Although it means absolute destruction to the rodents, it is perfectly safe for the farmer to handle and cattle cannot be injured or endangered by its use. It is non-explosive, does not deteriorate with

age and is cheaper than similar material on the market. 40c doz.; by mail, 50c doz.; 3 doz., \$1.00; box of 125, \$2.75.

Balfour, Guthrie & Co., San Francisco; Alexander Burness, Agent, Brentwood, Cal., April 23, 1921. To Whom It May Concern: We have used the Gas Ball manufactured by the Sunset Chemical Company to fight the squirrels on the Marsh Ranch during the last year. Their recent product has proven to be extraordinarily effective here. We have secured a practically perfect record of kills where reliable men have covered the ground thoroughly.—Gladstone Reed, Manager, Marsh Ranch.

SULPHUR FOR ALL PURPOSES TO INCREASE CROP YIELDS

Experiments conducted during the past few years by noted soil chemists and practical cultivators have revealed that **"TORO"**—

1. Is readily utilized by plants as stimulating food.

2. It improves alkali soils by neutralizing the alkali which rises to the surface or which is carried in by the irrigation water.

3. Promotes nitrification: Dr. F. C. Reimer, in Oregon Agricultural Bulletin No. 163, says, "The various sulphur fertilizers have a very stimulative effect on the root system, increasing its size and the number of nodules. This is of great value in taking up larger quantities of plant food, moisture and atmospheric nitrogen."



SPRAY BEFORE THE INSECTS APPEAR—DON'T WAIT UNTIL IT IS TOO LATE

INSECTICIDES

4. Transforms latent potash and phosphates into available plant food.

5. Increases protein and feeding value of crops.

6. Destroys the spores of Fungi and larvae of injurious insects in the soil. Prevents potato scab, wire-worms, eel worms or nematodes, ants, smutty grain, etc.

Drill into the soil 220 to 400 pounds per acre of "TORO" Brand Agricultural Sulphur.

Single sack lots, \$5.00 per sack of 110 lbs., f. o. b. San Francisco. Write for prices in quantities.

ANCHOR BRAND VELVET FLOWERS OF SULPHUR

For Dry Dusting of Trees, Vines, etc., Bleaching Fruit, etc.

It has been proven and so recommended by the University of California that if you sulphur your grape vines and orchards 6 times they will not be affected by Mildew or Red Spiders.

Anchor Brand Velvet Flowers of Sulphur, also Eagle Brand, Fleur de Soufre, packed in double sacks, are the fluffiest and purest sulphurs that money can buy; the best for vineyards; the best for bleaching purposes. **Leaving no Ash.**

Ventilated Sublimed Sulphur—Impalpable Powder, 100% pure, in double sacks, for Dry Dusting and making Paste or wettable Sulphurs.



Single sack lots, \$4.95 per sack of 110 lbs., f. o. b. San Francisco. Write for prices in quantities.

For Lime-Sulphur Solution and General Purposes, Use Our

DIAMOND "S" BRAND REFINED FLOUR SULPHUR



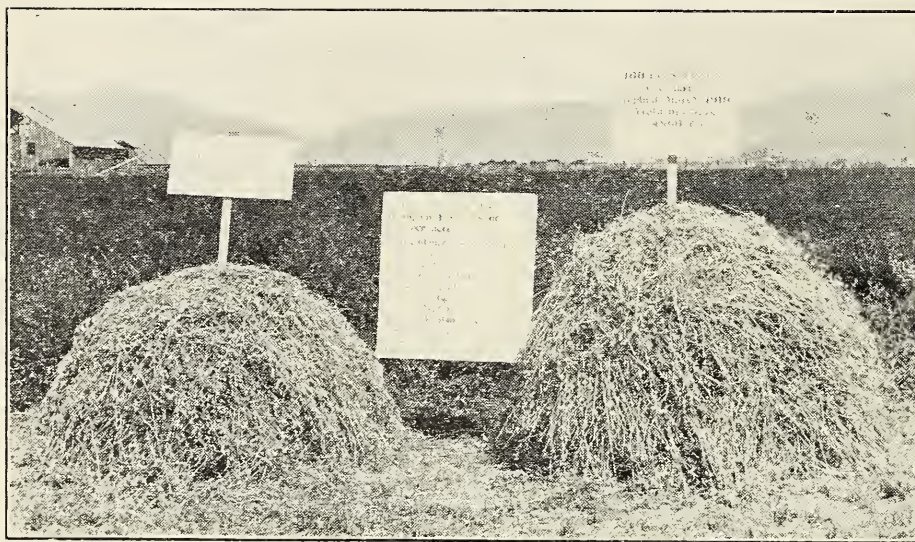
For Lime-Sulphur Solution, use our Diamond "S" Brand Refined Flour Sulphur. We can furnish you this sulphur at such a low price that it would pay you to mix your own solution and net you a profit equal to the amount paid out for labor in spraying your orchard, even if you pay your men \$5 per day for making the solution and applying same.

Single sack lots, \$3.35 per sack of 110 lbs., f. o. b. San Francisco. Write for prices in quantities.

Sulphur for all Purposes to Increase Crop Yields

A successful grower in Fresno County told the San Francisco Sulphur Co. as follows:

"Last year I bought a sack of "TORO" and used the same on a few spots where my alfalfa never grew over 12 to 18 inches tall, and the Bermuda grass was almost choking it out. Today the alfalfa on those spots comes up to the horses' collars, and my team is not small by any means."



Yield per acre—3300 lbs.
No Sulphur

100 lbs. Sulphur per acre, applied March,
1919, yield per acre—4860 lbs.

And another recognized authority, farming near Sacramento, California, says:

"The results from the "TORO" the first year were more than satisfactory. We can notice a difference in the growth of the trees, and in the color of the leaves. The fruit on

the 40 acres of the orchard was considerably larger than on the other half, which consisted of 40 acres. The whole orchard of 80 acres is planted to peaches, and we are so thoroughly satisfied with results that we have purchased enough additional "TORO" to cover the balance of the orchard in the fall, 1921."

Recently in a County Agent's bulletin, the following reproduction appeared:



When in San Francisco don't fail to visit our large retail store 147-149 Market St. Here you can meet our representatives who will answer all questions cheerfully and help solve some of your garden or farm problems. Nurserymen and seed experts are always on hand. You will feel at home in our store.

FERTILIZERS, SOIL BACTERIA AND PLANT STIMULANTS

PENNEWELL'S PURE CULTURE SOIL BACTERIA

Are You Going to Plant Alfalfa, Clover, Peas, Beans, Vetch, Cowpeas, Soy Beans (for hay, seed or green manuring) or any other member of this family of plants, that are known as Legumes and bear their seed in pods?

If you are going to plant any of them you will need much more Nitrogen than you will to grow plants of any other kind.

Have You Got It? Are You Positive That You Have?

If you have not sufficient Nitrogen, your crop will be in proportion only to the amount of Nitrogen you have—short in proportion to the amount you are lacking.

This is a Fact, Not a Theory. It's a law without exception, that if Nitrogen is lacking, your crop will be lacking also.

How to Get It—There are three ways to overcome this lack of Nitrogen: by applying: (1) Manures; (2) Fertilizers (Commercial), or (3) Soil Inoculation.

Here is a true comparison: 10 tons of Stable Manure; or 850 lbs. of Nitrate of Soda; or 50c worth of Pennewell's Pure Culture of Nitrogen Gathering Bacteria.

A culture of proven worth, one virile and capable of doing its work, at a price previously unknown. Bred scientifically, and in containers best adapted for the purpose designed. Sold on its results, with a record of over 94 per cent successes—season 1920.

FLORAFERRO SOIL STIMULANT—It cleans and purifies foul soils. It kills snails, slugs, cutworms, etc. It breaks up heavy soil and adds plant food element to the soil, making it more fertile. Two-and-a-half-pound package covers 250 square feet. Price, 50c.

HOLLAND PEAT—We import this peat from Holland, as it is clean and free from weed seeds and fungus disease. Holland Peat breaks up heavy soils and puts body into sandy soils. It is used by all nurserymen and greenhouse men. As a lawn dressing it cannot be beat. It cuts your water bills in half, as it is very spongy, holding moisture for a long time. Try some and be convinced. One bale of about 115 lbs. covers a place about 20x40 feet. Price, \$6.00 a bale.

BONE MEAL—An excellent fertilizer, moderately strong. 5 lbs., 40c. (In sack lots), per 100 lbs., \$4.00.

NITRATE OF SODA—Dissolve when using, and use very sparingly; is very strong and apt to burn. 3 lbs., 25c; 100 lbs., \$5.50.

SHEEP MANURE—Very mild, excellent for putting into potting soil, as it helps the texture and increases the fertility. Good for all plants, even the most tender. 10 lbs., 50c; per sack, 100 lbs., \$2.00.

GOLD BEAR FERTILIZER—Will build up all plant life. Contains just the food elements needed and in the right proportion. No odor. Quick results. 10-lb. pkg., 75c; 25-lb. sack, \$1.50; 100 lbs., \$3.50.



Results of an Application of Red Eagle Brand Fertilizer

Price list. Packed in 3 sizes—1, 2½, 5-acre containers.

1 acre	75 c per acre
2½ acre	50 c per acre
5 acre	50 c per acre
10 acre	50 c per acre
25 to 50 acre	49 c per acre
50 to 100 acre	48½ c per acre
100 to 500 acre	48 c per acre
500 or over	47½ c per acre

F. O. B. San Francisco, Calif. Terms: Cash.

The crops produced by the aid of Pure Culture Soil Bacteria is the "LITTLE MORE" and the price of Pennewell's Pure Culture tells how to get the Little More, at a Little Less.

VITAMITE—The wonder Bacteria applicable to all plant life. Testimonials on Barley (without cover crop), citrus orchards and all kinds of crop. Restores fertility to old worn-out soil. Nothing better for your garden and lawn. Trial size, 50c. Prices for acres, \$2.50. Send for circular.

FLORA FERTILIZER—A complete fertilizer put up for house plants, window boxes and small gardens. 2-lb. cans, 30c.

RED EAGLE BRAND FERTILIZER—For garden or farm. 10-lb. bag, 75c; 25-lb. bag, \$1.25; 50-lb. bag, \$2.00; 100-lb. bag, \$3.50. Write for prices on larger quantities, and further information.

STIM-U-PLANT

PLANT STIMULANT TABLET

Trade Mark Registered U. S. Patent Office

The most modern, efficient and scientific method of fertilizing growing plants.

Stim-U-Plant is the richest plant food on the market and is put up only in tablet form containing 11 per cent Nitrogen, 12 per cent Phosphoric Acid, and 15 per cent Potash. Stim-U-Plant tablets are water soluble and immediately available. Small size, 30 tablets, 25c; medium size, 100 tablets, 75c.

IF YOU WISH A LAWN OR GARDEN PLOT TO BE UNUSUAL TRY A BALE OF HOLLAND PEAT

POULTRY SUPPLIES

DR. HESS POULTRY PANACEA



makes poultry healthy; makes hens lay; not a stimulant, but a tonic, that tones up the dormant egg organs, brings back the scratch and cackle, and compels each hen to put her share of eggs in the market basket.



It also contains internal antiseptics that counteract disease; insures a healthy, singing poultry flock. Cost but a trifle—a penny's worth enough for 30 hens per day. 1½ lbs., 30c; 3 lbs., 60c; 7 lbs., \$1.25; 25-lb. pail, \$3.50. Guaranteed.

DR. HESS DIP AND DISINFECTANT

Non-poisonous and non-irritating and guaranteed to be absolutely uniform in strength at all times. One gallon of Dip makes from 70 to 100 gallons effective solution. Spray it on roosts. Sprinkle it over the runs and in all cracks and crevices. Spray it on cattle and horses. Makes a splendid dip for hogs and sheep. It's a sure parasite and disease germ destroyer. Purifies stables, troughs, sinks, drains. Guaranteed. 1 qt., 85c; ½ gal., \$1.50; 1 gal., \$2.50.



DR. HESS ROUP REMEDY

For Roup, Diphtheria, Chicken Pox and all catarrhal diseases. It has these distinctive features: It is antiseptic, slightly astringent, non-irritating and healing. 4-oz. cans, 25c; 10-oz. cans, 50c. Guaranteed.



DR. HESS' WHITE DIARRHOEA REMEDY

The best medium for this dangerous disease of little chicks. Price, small size, 25c; large size, 50c.



INSTANT LOUSE KILLER

Kills lice on poultry, horses, cattle; sheep ticks; bugs on cucumber, squash and melon vines; cabbage worms; slugs on rose bushes, etc. Sold in sifting-top cans—look for the word "Instant" before buying. Guaranteed. Small size, 30c; large size, 60c.



DR. HESS FLY CHASER

Drives flies away. One application lasts six hours. Prevents milk slump. Keeps cattle and horses contented during the fly season. Most humane idea of the age. Its use during summer months will insure good profits. Guaranteed. ½ gal. can, \$1.50.

DR. HESS STOCK TONIC



25lb. Pail.

The preparation having a record of 18 years to guarantee it. Everything it contains recommended by the Medical Profession. Every pound guaranteed by Dr. Hess & Clark. Produces Greater Growth and More Milk at Less Cost than without it. The secret is, it Increases Digestion and Keeps Stock Healthy. Only requires one pound of additional growth per month per average Hog to pay for Dr. Hess Stock Tonic. It's worth a lot, too, to keep your stock healthy—maybe save the life of an animal. In 25-lb. tubs, \$3.00.

DR. HESS WORM POWDER

For horses, sheep, cattle and hogs. It is highly concentrated and is an effective vermifuge. Dr. Hess' own prescription that proved effective in his practice. Price, 1½ lbs., 50c. Guaranteed.



DR. LE GEARS REMEDIES

Dr. Le Gears Poultry Prescription.....	30c, 60c, \$1.25
Dr. Le Gears Lice Powder.....	.30
Dr. Le Gears Roup Remedy.....	.25
Dr. Le Gears Cholera Remedy.....	.25
Dr. Le Gears Dip and Disinfectant, qt., 75c; gal.....	2.00

CONKEY'S REMEDIES

Scaly Leg Remedy.....	\$.25
Roup Remedy.....	.25
Gapes Remedy.....	.25
Poultry Worm.....	.25
White Diarrhoea.....	.25
Cholera.....	.25
Head Lice Ointment, small size, 15c; large size.....	.25
Send for complete Conkey price list.	

BUCKEYE INCUBATORS

The world's best incubator. Automatic regulation. Hot water heating system. Send for complete catalogue.

No. 14, 65 eggs	\$18.00
No. 16, 110 eggs	30.75
No. 17, 210 eggs	40.50

Prices of larger sizes on application.

Send for complete Buckeye catalogue, it's free.

POULTRY SUPPLIES

BUCKEYE BROODERS

Round Metal Type

No. 20, 60 chicks	\$12.50
No. 21, 100 chicks	16.25
No. 22, 150 chicks	20.00

Larger sizes, price on application.

We also carry Jubilee and Petaluma Incubators and Brooders. Prices on application.

FEED CUTTERS AND MILLS—See page 54.

THERMOMETERS

Brooder, each.....	\$1.00
Incubator, each.....	1.00
Greenhouse, each.....	45c, .60
Mushroom Bed, each.....	1.75

CARYIZED STOCK TONIC BRICK
(Salt Lick)

Each	\$.35
CHARCOAL—7c per lb.; 50-lb. sack, \$2.75.	
GRIT—3c per lb.; \$1.25 per 100 lbs.	
OYSTER SHELL—3c per lb.; \$2.00 per 100 lbs.	
GROUND BONE—10c per lb.; \$4.00 per 100 lbs.	

BIRD SEEDS

Fancy Recleaned

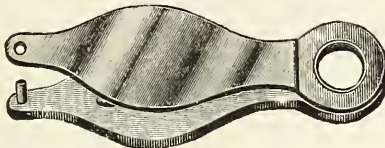
	Per lb.
Imported Canary.....	\$.10
Imported Essex Rape.....	.15
Hemp .....	.10
Millet .....	.10
Common Rape.....	.10
Mixed Bird Seed.....	.10
Bird Sand.....	.02
Sunflower Seed.....	.10

POULTRY HOUSE SPRAYERS—See page 50.

MOE'S POULTRY PUNCH

A popular and practical Punch. Makes a clean perforation and does not bruise the foot.

No. 38. Moe's Punch, each, 30c, postpaid.



SPIRALET CELLULOID COLORED LEG BANDS

Made of the best quality Celluloid. White, black, dark blue, light blue, red, pink, garnet, green, yellow. (Sizes) for Leghorns, Asiatic, Mediterranean. 12 bands, 15c; 50 bands, 50c; 100 bands, 75c, postpaid. Baby chick size, 10c doz.

Aluminum adjustable bands numbered 1 to 100, \$1.00 per 100.



WATER AND FEED CUP

Fine for Exhibition Coops. Capacity, about 1 pint.

No. 61. Galvanized Cup, each, 25c.



BOTTOM FILL FOUNTAINS

The round taper shape prevents damage from freezing. Made in two pieces accurately formed. Easily filled and cleaned. Price, 60c.



BROODER FOUNTAIN



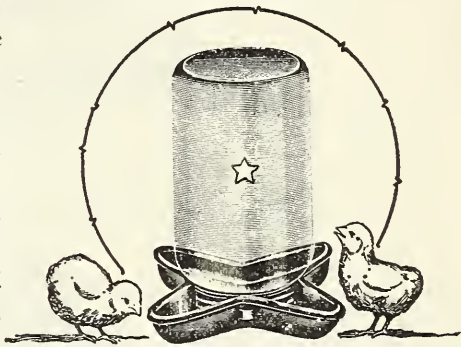
Occupies but a small space in a corner of the brood coop. Can be hung up off the floor, so baby chicks can not get wet. A simple sanitary fountain. Price, 60c.

WALL FOUNTAIN

A very practical water fountain made of heavy galvanized iron; can be hung on the wall, up out of the litter. Capacity about one gallon. Price, \$1.00.

MOE'S STAR FOUNTAIN
AND FEEDER

Made of a single piece of heavy metal. No solder, no seams, no loose parts. Suitable for feed as well as water. Little chicks can not drown. Fits any Mason jar in 1 pint, 1 quart, and 2-quart sizes. No. 32. (Glass jar not included) Each, 20c, postpaid.

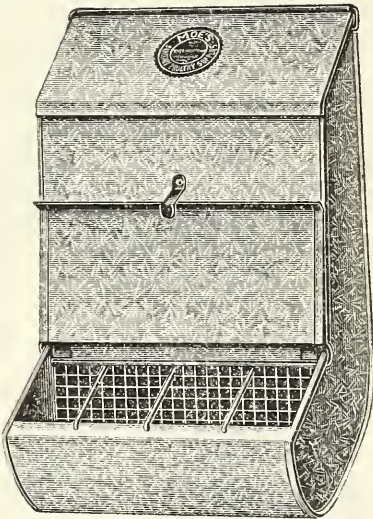


Crockery Founts.....	35c, 50c, .75
Rabbit Feeders, crockery.....	.25

MOE'S DRY
MASH HOPPERS

A strictly high quality hopper, properly designed. The curved bottom keeps the feed in easy reach, and the taper shape of the hopper prevents the feed from clogging. Height, 19 in.

No. 35. Width, 8½ in., each.....	\$2.00
No. 36. Width, 12 in., each.....	3.00



MOE'S GRIT AND SHELL BOXES

A special feed hopper and grit box for baby chicks. Thoroughly well made, no solder used in its construction.

No. 45. Two compartment, each.....	\$.55
Economical and practical for feeding grit, shells, etc; keeps the fowls in prime healthy condition	
No. 9. Three compartment, each.....	\$1.30



POULTRY SUPPLIES

MOE'S SINGLE FEEDING TROUGHS

For chicks and growing stock. Accurately stamped with dies. No rough edges, and can be hung on the wall. Sliding top.

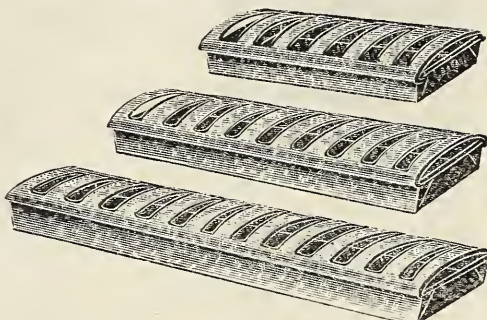


No. 55. Length, 12 in.	.....	each	\$.45
No. 56. Length, 18 in.	.....	each	.55
No. 57. Length, 24 in.	.....	each	.75

MOE'S SANITARY FEEDING TROUGHS

Accurately stamped with dies. No sharp or rough edges to injure the chicks. Top slides off, so pan is easily filled and cleaned.

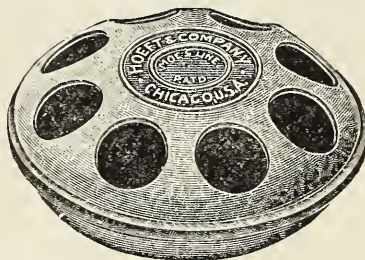
No. 21. Length, 12 in.,	each.....\$.65
No. 22. Length, 18 in.,	each......75



MOE'S BABY CHICK FEEDERS

A great feed saver, and can also be used for water or milk. Accurately stamped with dies. Top fits snugly, yet is easily taken off for filling and cleaning.

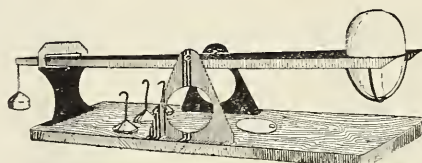
No. 12. Diameter, 8 1/4 in., with 12 holes.....	\$.50
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IMPROVE YOUR GRADE

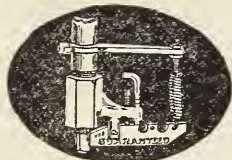
The Gilt Edge Scale is universally used throughout the United States and Canada.

Has a weighing capacity of from 18 to 29 ounces per dozen, graduating by the ounce per dozen. Guaranteed to give satisfaction.



Price each,	\$2.00;
via Parcel Post,	\$2.10.

AUTOMATIC WATER FOUNTAIN



The guaranteed Automatic Water Fountain especially designed for poultry. May be attached to any water line regardless of pressure.

Any kind of a water pan or trough will work perfectly with the "Guaranteed." Price each, \$1.50; via Parcel Post, \$1.60.

LEE'S GERMOZONE

The great poultry and stock medicine. One teaspoonful in each quart of drinking water cures Roup, Cholera, Swelled Head, Chicken Pox, Canker, etc. Good for stock in case of Cuts, Wounds, Sore Eyes, Sore Breast, etc. 75c per bottle.



It fills the demand for an inexpensive but reliable disinfectant and paint. It has none of the objectionable qualities of whitewash and it paints and disinfects in one operation. Carbola is made by combining a finely powdered mineral pigment with a disinfectant 20 times stronger than carbolic acid. It is neither poisonous nor caustic—harmless to the smallest chick or to stock that licks a painted surface—but it kills lice, mites, fly eggs, etc., and helps prevent the start and spread through flocks and herds of many of the contagious diseases that affect poultry and livestock.

Carbola is used and endorsed by thousands of poultrymen, dairymen and breeders, and by many agricultural colleges and experiment stations.

The testimonials reproduced in this leaflet are typical of thousands that have come unsolicited from users in all parts of the country. You will be just as pleased.

Easy to Mix Carbola

Carbola comes in powder form, packed in different sized packages one of which will fit your needs. To mix it put the Carbola in a pail and stir in water, a little at a time, until the mixture is as thick as ordinary oil paint—it is then ready to use. Carbola will not spoil either in its dry form or after it has been mixed. You can apply it with a brush or a spray pump to wood, brick, stone, cement, plasterboard, tar paper, etc., or over whitewash. It will not clog the sprayer, has no disagreeable odor to taint milk or other food products, and will not flake or scale off the way whitewash does. One gallon covers 200 square feet. Use one pound of powder to a gallon of water for surfaces that have been painted or whitewashed—two pounds for unpainted surfaces. When first applied Carbola looks watery, but it dries out in an hour or two leaving the walls with a smooth finish that is whiter than whitewash, that will increase the light in the building, improve its appearance and make it sweet-smelling and sanitary. For use out of doors add a pound of cheap glue dissolved in hot water for every 10 pounds of Carbola.

As a Louse Powder

Carbola is excellent for use on poultry, cattle, horses, dogs, hogs, etc. It costs one-third as much as other brands and gives sure results in controlling lice, mange and other skin parasites and diseases. Separate the hair or feathers of the animal or bird affected and apply the dry powder directly to the flesh. In the poultry house, you will find it helpful to sprinkle some in the nests, in the litter on the floor, on the dropping boards and in the dust bath. In stables and pig-pens, sprinkle some in the stalls, in the manure drain and on the floors. You also will find it beneficial for dusting squash, tomato and potato vines, and for painting the trunks of fruit trees.

Give Carbola a trial—you never will regret it—and you can get your money back if you are not satisfied. Your hardware, seed, paint, drug or poultry supply dealer has Carbola. If not, order direct for prompt shipment by parcel post or express.

Used in Stables, Cellars, Dairies, Garages, Factories, Hog Pens, Creameries, Warehouses, Outbuildings, Dog Kennels, Rabbit Hutches, Poultry Houses.

Makes work easier, saves time, labor and money; gives better results.

Trial package, 35c; 10 lbs. (10 gal.), \$1.50; 20 lbs. (20 gal.), \$3.15; 50 lbs. (50 gal.), \$6.25; 200-lb. bags, \$22.00.

NURSERY DEPARTMENT

Each season we retail a complete stock of ornamental shrubs, shade or fruit trees, vines, bedding and vegetable plants, etc. In offering the following limited list of nursery stock our many customers appreciate that most descriptions and lists have a tendency to become more or less stereotyped. **OFTEN NAMES ARE MEANINGLESS OR CONFUSING** to many who have gardened for a number of years. **If you are in doubt send or bring in your specimens of flowers, fruit, or shrubbery for identification.**

NOTICE TO CUSTOMERS

CUSTOMERS are requested to state the mode of conveyance by which they desire their order forwarded. When no route is named, we forward to the best of our judgment, without liability for error or delay.

No trees or plants sent C. O. D.

All trees and plants are carefully and securely packed in the best manner, for which a small charge is made sufficient to cover cost of material used, unless otherwise specified.

We warrant plants and trees true to name and in healthy growing condition **at time of shipment or delivery, but we are not responsible** for any damage that may occur while in transit, nor do we guarantee the purchasers success in cultivation of same. It must be plain to everyone that it is to our best interest to sell only such stock as will grow and prove true to name. If errors should occur please notify us immediately and we will make satisfactory corrections, but it is mutually agreed between the purchaser and ourselves that we shall not at any time be liable for any amount greater than the original price of stock.

FLOWERING AND BEDDING PLANTS

We grow most of the popular flowering and ornamental plants from seed in boxes for our Spring Trade. Anyone can have a successful garden with the least amount of care at a saving of considerable time from these small plants which are generally 4 to 6 inches high at time of sale—February to May. Descriptions of most of the varieties listed below can be found on the pages devoted to Flower Seeds.

When priced at 35c per dozen 100 plants are \$2.25.

When priced at 50c per dozen 100 plants are \$3.50.

When priced at 75c per dozen 100 plants are \$5.00.

Postpaid to 1st, 2nd and 3rd zones.

Packed right free. That insures results.

50 at ½ 100 rate—6 plants at Dozen Rate.

ANNUALS—Comprise some of our most popular cutting and bedding flowers. All are very free flowering and satisfactory. Be sure to order from this list if you want quick returns.

	Dozen
ASTERS —Mammoth mixed colors only.....	\$.50
CALENDULA —Best double yellows and orange mixed.....	.35
CALLIOPSIS —Finest single mixed.....	.35
CENTAUREA —Bachelor Buttons—deep blue or mixed.....	.50
CENTAUREA —Sweet Sultans—choice double mixed....	.50
CHRYSANTHEMUMS —Mixed only from florists' varieties	1.00
COSMOS —Single Giants of California mixture.....	.50
GAILLARDIA —Single mixture—good for cutting.....	.50
GOSETIA —Satin Flower—finest mixture, all colors....	.50
LARKSPUR —Annual Double Emperor mixed.....	.50
LOBELIA —Dwarf, bright blue, "Crystal Palace".....	.35
MARIGOLD —Dwarf, French mixture of doubles.....	.35
MARIGOLD —Tall Double French mixed.....	.35

	Dozen
MARIGOLD —Tall Double Giant African mixed.....	.35
PANSIES —Seedlings of our Giant Strain.....	.35
PETUNIAS —Giant Ruffled Single mixed.....	.75
SALPIGLOSSIS —Finest Emperor Single mixed.....	.50
SCABIOSAS —Pin Cushions—special mixed.....	.50
SNAPDRAGONS —Tall large flowering mixed.....	.50
STOCKS —Summer or 10-Weeks, any color.....	.50
STOCKS —Winter or Nice, any color.....	.50
ZINNIAS —Special Mammoth mixed.....	.50

PERENNIALS—This group is exceedingly valuable and becoming more popular each season as our customers become acquainted with the fact that they are permanent, giving results year after year with very little attention. See Hardy Perennial Plants for large year-old clumps.

	Dozen
COREOPSIS —Single pure yellow, good cutter.....	\$.50
CALCEOLARIA —Yellow or brown mixed.....	.75
COLUMBINE —Fine single mixed.....	.75
CINERARIAS —Giant Exhibition—best and largest.....	.50
CHRYSANTHEMUMS —Large boxes mixed.....	1.00
CANTERBURY BELLS —Single mixed only.....	.75
DELPHINIUMS —Hybrids in many blues.....	.75
DIANTHUS —Double border mixture.....	.50
FORGETMENOT —Alpestris—best blue.....	.50
FOXGLOVES —Tigered and Spotted mixed.....	.75
HOLLYHOCKS —Single or Double mixed.....	.75
PRIMROSES —Pure yellow or fine mixture.....	.50
PENSTEMON —Rooted cuttings, mixed.....	.75
SALVIA —Splendens—best scarlet bedding.....	.50
SHASTA DAISY —Beautiful pure white.....	.50
SWEET WILLIAM —Finest single mixed.....	.75
VERBENAS —Very choicest, separate colors.....	.50
WALLFLOWERS —Best single mixed.....	.50

BORDER OR EDGING PERENNIALS

Our Selection of the Best Sorts

ARMERIA —(Sea Pink) Grasslike foliage, small pink flowers.....	35c doz.; \$2.25 per 100
BOXWOOD —(Dwarf Box) Most permanent edging sold.....	.75c per doz.; \$6.00 per 100
BORDER PINKS —Well known fragrant flowers.....	.50c per doz.; \$3.50 per 100
DAISIES —Popular dwarf English double daisies.....	.50c per doz.; \$3.50 per 100
GOLDEN FEATHER —Yellow cut leaved foliage.....	.35c per doz.; \$2.25 per 100
PRIMROSE —Yellow English sort, free blooming.....	.50c per doz.; \$3.50 per 100
PRIMROSE —All colors mixed. Makes fine border.....	.50c per doz.; \$3.50 per 100
SANTOLINA —Gray green foliage. Good for designs.....	.35c doz.; \$2.25 per 100

PACKED RIGHT. THAT IS WHY OUR PLANTS ARRIVE IN PERFECT CONDITION

HARDY PERENNIAL PLANTS

Each season we carry over the most popular perennials and offer 1-year-old clumps or roots grown in the open ground or pots to give immediate results. We can recommend the following varieties to give an abundance of flowers the season of planting. We pack all our nursery stock with great care knowing that often they are in transit 5 or 6 days.



We recommend shipping plants by Express. However, if small lots are required by Parcel Post within 3rd zone, add 5c for each single plant order, or, 20c for each dozen plant order. This includes proper packing for safe arrival.

ACAPANTHUS—(Blue African Lily)—Any location, 3 feet. Produces large clusters of 25 to 30 bells of beautiful bright blue flowers on long thick stems in the fall and summer. Can be grown very easily from our large clumps at 30c each; \$3.00 per 12.

ANEMONE JAPONICA—(Windflower)—Particularly suited for a half shady place this beautiful perennial blooms profusely late in the summer until fall. Splendid for cutting. White and pink, strong clumps, 30c each; \$3.00 per dozen.

CALCEOLARIA—(Lady's Purse)—Part or full shade, 2½ feet. Popular and easily grown plants of shrubby growth bearing clusters of brown or yellow flowers that resemble small boxing gloves. Brown or pure yellow, pot grown, 35c each; \$3.50 per dozen.

CAMPANULA—Sun or part shade.

Medium—(Canterbury Bells)—3 feet. Hardy free flowering biennial producing a wonderful display of bell-shaped flowers. Blue, white and rose; extra strong roots, 15c each; \$1.50 dozen.

Calycanthemum—(Cup and Saucer)—3 feet. Similar to above but has a broad rim or saucer around cup-like center. Blue, white and rose; extra strong roots, 20c each; \$2.00 dozen.

COREOPSIS LANCEOLATA—Sunny, 2½ feet. One of the finest deep yellow single cut flowers grown. Try a few clumps and your results will be gratifying. Strong roots, 15c each; \$1.25 per dozen.

CANNAS—Sunny warm locations are best. Gorgeous and effective bedding plants with tropical-like green and bronze foliage. They grow well in any soil, responding quickly to liberal treatment. Present a brilliant and continuous display until frost.

KING HUMBERT—Brilliant orange-scarlet flowers. Foliage is a rich coppery bronze and green; 5 to 6 feet.

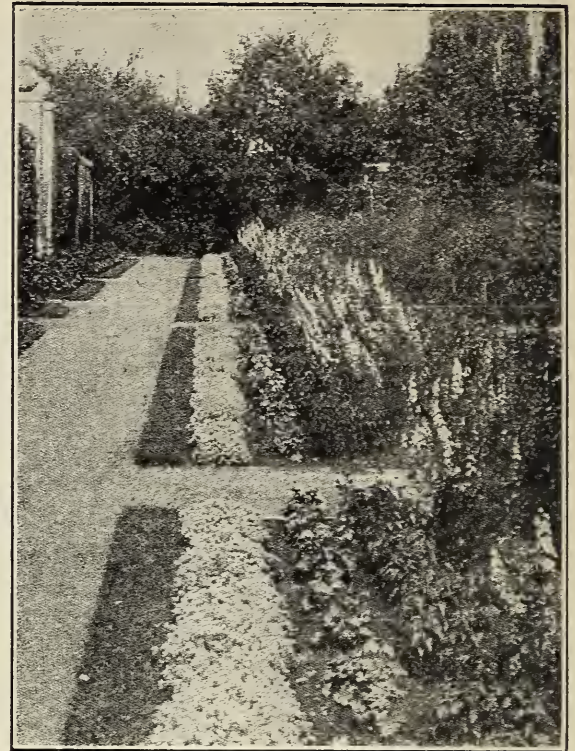
LOUISIANA—Beautiful dark crimson blooms, set off by its dark green foliage; 5 feet.

WYOMING—Massive orange colored flowers of orchid shape with bronzy purple foliage; 7 feet.

FIREBIRD—The largest and brightest red known. The flowers are 8 inches across and very showy.

MRS. A. F. CONARD—Best large pink suffused salmon, bright green leaves; 5 feet.

CARL LUTZ—Magnificent deep golden yellow; absolutely the finest in its color; 5 to 6 feet. Above varieties at 25c each; \$2.50 per dozen. Collection of 1 each above 6 sorts for \$1.25.



A SPLENDID PERENNIAL BORDER

CARNATIONS—Sunny, warm location; 2 feet. Carnations will thrive in any good fresh garden soil. Keep them watered and cultivated while they are growing, mulching with a light straw manure when the buds come. Staking is usually necessary at this stage. The following list contains a very choice collection of colors: Fine, strong, well rooted plants, 20c each; \$2.00 per doz.

BELLE WASHBURN—Finest fringed bright scarlet.

WHITE ENCHANTRESS—Superb pure white.

HARLOWARDEN—Splendid, very deep crimson.

MRS. C. W. WARD—Beautifully formed deep pink.

BENORA—Creamy white, penciled bright red.

ENCHANTRESS SUPREME—Light salmon pink.

YELLOW PRINCE—A good yellow.

AVIATOR—Very free blooming, rich scarlet.

MATCHLESS—Sweetly perfumed new white.

ROSE PINK ENCHANTRESS—Well known deep pink.

Laddie

35c Each

Remarkable new glistening salmon pink that is easily grown. Immense perfect flowers on long stiff stems.

SPECIAL OFFER—10 distinct varieties. Every one a leader in its color; including Laddie. This is your **CARNATION** starter; only \$2.00.

Customers will please recall that Rush Season often causes unavoidable delays.

We will make every effort to fill your order as promptly as possible under such circumstances.

RESULTS ARE OBTAINED WHEN YOU PLANT OUR NURSERY STOCK

CHRYSANTHEMUMS—Sunny location; 4 to 5 feet. Everyone admires the wonderful blooms of this favorite flower sold by our local florists. We are sure you can get very good results with limited amount of attention with our strong, well-grown, hardy plants. Ready about May 1st. Pot grown, 20c each; \$2.00 per dozen.

GIANT EXHIBITION JAPANESE TYPES

WILLIAM TURNER—Immense, incurved, pure white.
MAJOR BONNAFFON—The very finest incurved, deep yellow.
CHIEFTAIN—The choicest incurving pink grown.
POCKETT'S CRIMSON—Well known crimson with a gold reverse.
COLONEL APPLETON—Prize winner everywhere. Golden yellow.
HARVARD—Brilliant bright crimson.
POMPONE OR BABY CHRYSANTHEMUM
LILIAN DOTY—Beautiful clear light pink.
LELIA—Attractive deep scarlet bronze.
NIPPON—White, with primrose shadings at center.
GOLDEN BEAUTY—Very pretty bright deep yellow.
CHINA'S GOLD—Beautiful bronzy yellow, button type.
BUTTON ROSE—Very fine deep rose, button type.



Our DELPHINIUMS will bloom like these in one season

DELPHINIUMS—Partial or full shade; 4 to 6 feet. The Perennial Larkspurs are among the grandest of all tall growing plants. Our strain is comprised of the most extraordinary range of blue shades imaginable. Cut back after the first blooms commence to fade and they will blossom a second and third time. Keep soil cultivated and use bone meal as a fertilizer.

GOLDEN STATE BLUE HYBRIDS—5 to 6 feet. Well balanced mixture of the choicest blues known. Extra large clumps, 25c each; \$2.50 per dozen.

BELLADONNA—4 feet. The freest and most continuous blooming type we grow, never being out of bloom after the first flowers until frost. Beautiful clear turquoise blue. Fine clumps, 35c each; \$3.50 per dozen.

FOXGLOVE—(Digitalis)—Any location; 6 to 8 feet. Stately old-fashioned flowers dominating the garden with its strong long stalks of beautifully spotted funnel shaped flowers. Strong roots, 15c each; \$1.25 dozen.

FUSCHIAS—Part or full shaded; 4 to 6 feet.

PHENOMENAL—Sepals bright red, double deep purple corolls.

STORM KING—Sepals dark red, double white and pink corolls.

ELEANOR—Sepals white, single bright pink center.

BABY FUSCHIA—Strong upright growth; red flowers. Extra strong pots, 50c each; 4 kinds for \$1.75.

GAILLARDIA GRANDIFLORA—(Blanket Flower)—One of the showiest permanent plants bearing quantities of large single brownish red and yellow flowers all season; 3 inches across. Fine for cutting; well established plants, 15c each; \$1.25 per dozen.

GERANIUMS—Any location.

All varieties of free blooming California Geraniums at 15c each; \$1.50 per dozen.

Single Flowering Varieties—

BRILLIANT SCARLET—Especially choice large trusses.

BRIGHT LIGHT PINK—Beautiful delicate color.

PURE WHITE—Immense trusses of purest white.

ROSE-PINK—Very distinct bright sort.

TALL VARIEGATED FOLIAGE—Best of this type.

DWARF SILVER LEAF—Very fine for borders.

Double Flowering Varieties—

DEEP RED—Very compact and free flowering.

PURE WHITE—Large trusses of snowy white.

ROSE PINK—Attractively shaded and large.

Ivy Leaved or Climbing—

DOUBLE BRIGHT PINK

DOUBLE SALMON ROSE

DOUBLE DARK RED

SINGLE LAVENDER

Exceptionally valuable for covering banks, fences or bedding. Blooms continuously with little attention and very little water.

GEUM MRS. BRADSHAW—Sunny; 2 to 2½ feet. Brilliant double red flowers resembling a carnation. Splendid for cutting and useful for borders. Extra strong clumps, 15c each; \$1.25 per dozen.

HELIOTROPE—Part or full shade; 4 to 6 feet. Everyone knows the fragrant old-fashioned garden favorite, often trellised to down a climber. Deep blue or light blue. Extra strong pots, 40c each.

HOLLYHOCKS—Best in sun; 6 to 10 feet. Stately, majestic, hardy plants of easiest culture admired by all. We grow our stock from an especially fine strain.

Double Flowering—Rose, yellow, red, white, maroon. Extra fine field grown roots, 15c each; \$1.50 per dozen.

Single Flowering—Rose, black, salmon, white, red. Extra fine field grown roots, 15c each; \$1.50 per dozen.

IRIS JAPANESE—Any location; 2½ to 3 feet. Easily raised, this type of Iris should be very popular when well known. They are evergreen, prefer a moist location, and produce blooms 5 to 7 inches across of remarkably beautiful flowers in the early summer. Imperial Rainbow mixture of many colors, 35c each; 3 for \$1.00.

IRIS GERMANICA—(Fleur des Lis or Flag Lily)—The Orchid of the garden that anyone can grow. Our collection is comprised of many new shades and the best in each color is offered below:

QUEEN OF MAY—Rosy lilac, almost pink, 32 inches.

MAJESTIC—Lovely rose pink and crimson, 24 inches.

GLOIRE DE HILLEGOM—Beautiful light clear blue, 30 inches.

FLORENTINE ALBA—Sweet scented glistening white, 24 inches.

MAORI KING—Yellow standards, wine red falls, 18 inches.

LOHENGRIN—Gigantic silvery mauve, 24 inches.

PALLIDA DALMATICA—Sweet scented lavender blue, 30 inches.

MADAME CHEREAU—White, penciled and edged blue, 32 inches.

Extra strong field grown roots, 25c each; collection of 8 for \$1.00.

GIANT FLOWERING PANSY PLANTS

60c per dozen—Strong Plants—\$4.50 per 100. Postpaid.
Ready any time for delivery.

Every conceivable Pansy color is found in our remarkable strain raised from the most expensive seed that can be obtained. You will be pleased with the almost endless variety and the complete satisfaction our Giant Pansy plants give.

POPPY ORIENTALE—Full or partial sun: 3 to 3½ feet. Oriental splendor is surely reflected in these magnificent fiery scarlet blooms often 10 inches in diameter. Strong plants, 20c each; \$2.00 per dozen.

PENSTEMONS

Any location; 2 to 3 feet. This is one of the most useful and showy perennials grown. Especially recommended by us. Beautiful bell and tube shaped flowers, blooming in a wonderful profusion all the year on long spikes like a giant snapdragon. Our collection is the most complete offered. Try them by all means.

1. Beautiful light pink.
2. Soft deep pink.
3. Red, with white throat.
4. Red, striped crimson throat.
5. White, lavender edge.
6. White, pinkish edge.

Heavy clumps at 25c each; collection of 6 for \$1.25.



Penstemons are recommended by us to everyone.

PHLOX HARDY PERENNIAL—Warm, sunny; 2½ feet. An old garden favorite, bearing clusters of 30 to 40 small single flowers on long stems in a wide range of colors. Extra fine mixture, 20c each; \$2.00 per dozen.

PYRETHEUM ROSEUM HYBRIDS—Any location; 2 to 2½ feet. Grand old-fashioned hardy perennial, rewarding the grower with quantities of single, daisy-like, fine cutting flowers in June and several periods later. The fine fern-like foliage is extremely attractive at all times. Strong roots, 15c each; \$1.50 per dozen.



PHYSOSTEGIAS
Are fine for cutting

SPLENDID NOVELTY

PHYSOSTEGIA —

Any location; 4 to 6 feet. One of the most beautiful of our mid-summer flowering perennials, forming dense bushes and bearing very long spikes of delicate tubular flowers closely set on the stem like small Foxgloves. Dainty lavender pink and white, 25c each; \$2.00 per doz.

PEONIES HERBACEOUS—Sun or partial; 2½ to 3 feet. To be successful with this old-fashioned garden favorite in California we offer only large, well developed crowns or clumps which we have found to give unusual results. The soil should be mixed with Holland Peat or leaf mould to insure a porous texture and well watered when they are in bloom. Our collection is local grown and especially suitable for California climate. Strong clumps in separate colors or assorted, 75c each; \$7.50 per dozen.

EDULIS SUPERBA—Deep rose pink, shading lighter.

FELIX CROUSSE—Brilliant flaming red.

FESTIVA MAXIMA—Finest pure white.

LA TULIPE—Very large full shell-formed blooms, color delicate rose fading to creamy white.

MADAME CHAUMY—Pale lilac rose with silvery reflex.

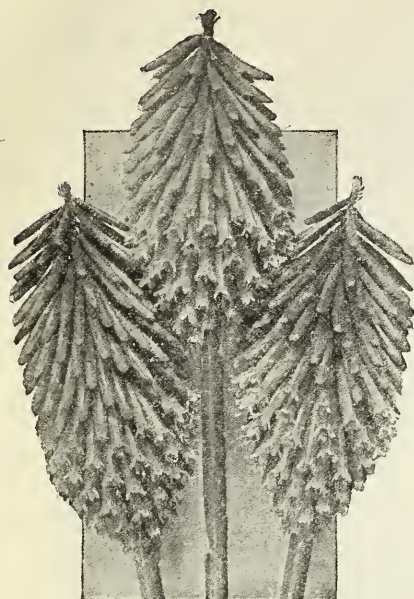
TRIUMPH DE L'EXPOSITION—Pale hydrangea pink.

RUDEBECKIA—(Golden Glow)—Sun: 5 to 6 feet. A well known popular plant of easiest culture and robust growth, producing masses of double golden yellow flowers on long stems resembling somewhat a decorative dahlia. Large clumps, 20c each; 6 for \$1.00.

ROMNEYA COULTERI—(Calif. Tree Poppy)—Sunny; 5 to 6 feet. This beautiful poppy blossoms the most delicate transparent, tissue paper-like flowers of purest white, often 6 to 8 inches in diameter, set off by a round ball of golden yellow at the center. Plant in well-drained sheltered location. Rooted plants from pots at \$1.25 each.

SAXIFRAGA—Shade or any location; 1 foot. Forms masses of handsome broad deep green foliage, made doubly effective by spikes of bright rosy pink flowers throughout the fall and winter. Extra strong plants, 50c each; 3 for \$1.25.

SCABIOSA CAUCASICA—Part shade or sun; 2 feet. Beautiful border plant bearing long stemmed clear lavender blue flowers crested at center. Often called Blue Bonnet and sold by the florists, being especially suited for cutting. Blooms June till September. Strong, well grown roots, 15c each; \$1.50 per dozen.



TRITOMAS

Make a blaze of color in the fall

Control your garden pests. See our spray section for advice.

TRITOMA—(Red Hot Poker)—Any location; 3 to 4 feet. Bold and showy. blooming from August to October. We believe that every garden can use one or more of these brilliant subjects that produce heavy spikes crowned with a head of rich orange-scarlet. Easily grown from our large clumps at 40c each; 3 for \$1.10.

VIOLETS—Part or full shade; 6 to 10 inches.
California Giants—Beautiful deep single blue; used for cutting by florists.

Marie Louise—Double light blue.

Swanley White—Double pure white.

Price, 50c per dozen; \$3.50 per 100.



THALICTRUM

Novelty

THALICTRUM DIP-TEROCARPUM — (Novelty)—All locations; 4 to 5 feet. We have been fortunate in setting aside a considerable number of this rare new hardy perennial for our customers this year. You will be pleased with the graceful airy effect that the tiny inverted pinkish lavender flowers make on its 36-inch stems. The flowers are set off and brightened with exceedingly showy yellow stamens, leaving an indelible impression on your memory. Blooms from July to September. Our clumps are extra heavy at 35c each; 3 for \$1.00.

DECIDUOUS SHRUBS AND TREES

Generally very free-blooming and exceedingly valuable to work in with evergreen foliage shrubs to give variety and seasonal change. Everyone has watched the dormant buds of Winter swell with the coming of a new season. The first warm days of early Spring and a remarkable new growth covers the winter bare stems.

As a rule this class is pruned after flowering, particularly the sorts that show from observation to have bloomed on the past season's growth. However, some shrubs and trees throw their flowers on the current season's wood and in this case can be pruned either when dormant or after flowering. Pruning encourages and develops a very dense growth, also keeping the shrub or tree within your specific bounds.

It is advisable to cut back about $\frac{1}{4}$ of the growth when received—exceptions noted. This insures a quick start and lessens the risk of loss.

BERBERIS—(Barberry)—Any location; 2 to 3 feet.

Vulgaris—This is the common hardy eastern "Barberry" with holly-like foliage and drooping racemes of yellow flowers, followed by orange-scarlet fruit.

Vulgaris Atropurpurea—Same character with purplish green foliage and purple fruit.

Thunbergii—Makes fine low-growing hedge from 1 to 2½ feet high. Small yellow flowers succeeded by red berries that hang on through winter.

Fine specimens of any of the above Berberis at 60c each. For Evergreen Berberis see page 69.

CALYCANTHUS—(Sweet Shrub)—A very attractive fragrance from its wood and peculiar chocolate-colored blossoms should find this shrub more generally planted. 2 to 3-ft. stock, 60c each.

CARYOPTERIS—(Blue Spirea)—Any location; 4 to 5 feet. Produces an abundance of lavender-blue flowers in whorls along the whole length of each shoot in the late summer and fall. You will be pleased with this uncommon shrub. 50c and 75c each.

CORCHORUS—(Kerria Japonica)—Part or full sun; 5 to 6 feet. Blossoms are deepest yellow, 1 inch in size, very double and set against the graceful stem in an almost artificial manner. One of the most admired and least known. 3 feet stock at 85c each.

DEUTZIA—Partial sunny. Graceful shrub, with slender branches and effective foliage covered with flowers in long racemes during the early summer.

Gracilis—2 to 2½ feet. Compact or bushy in habit, covered with spikes of pure white flowers.

Crenata—3 to 4 feet. A taller, more vigorous variety, producing double white flowers.

Strong specimens of either kind at 75c each.

FORSYTHIA—Part or full sun; 6 feet. Blooms with first days of spring, its delicate clear yellow flowers set in small clusters on long drooping sprays, making it very distinct from all other shrubs. Nice stock at 75c each.

HAWTHORNS—Any location; 15 feet. Very free flowing spring blooming trees covered with clusters of small rose-shaped flowers produced on long sprays. Fine for cutting. Do not cut back when planting.

Double White—When opening tinged light pink.

Double Bright Pink—Beautiful soft rose pink.

Double Bright Scarlet—Especially brilliant color.

2-year-old, 5 to 6 feet, \$1.50 each.

3-year-old, 6 to 8 feet, \$2.50 each.

Immediate results. Guaranteed to flower the season planted.

HYDRANGEAS—(Deciduous)—Part or full shade; 6 feet.

Paniculata—Should be a most popular shrub, the large heads of pyramidal white flowers blooming for a long season are especially attractive. Moist location best. Strong stock at 85c each.

LILACS—Partially sunny location best. One of the most fragrant and indispensable shrubs sold and no garden is complete without at least one Lilac. We are adding a remarkable new class of **GIANT BUDDED FRENCH LILACS** to our list this season that will generally bloom the first year planted. Do not cut back when planting.

SINGLE GIANT BUDDED FRENCH LILACS—

Price, 4 to 5 feet, \$1.25 each.

Charles X.—Loose trusses, reddish purple.

Ludwig Spaeth—Distinct dark purplish-red.

Uncle Tom—Darkest lilac blue known.

Prof. Stockhardt—Large clear lavender.

DOUBLE GIANT BUDDED FRENCH LILACS—

Price, 4 to 5 feet, \$1.25 each.

Charles Joly—Dark reddish purple.

President Carnot—Beautiful pale lilac.

Madame Leinoine—Finest double white.

President Grevy—Large purplish blue.

PERSIAN LILACS—PURPLE or WHITE—Dwarf grow-ing slender graceful branches and narrow leaves.

Price, 3 to 4 feet, \$1.25 each.

COMMON WHITE—Extra strong, 85c each.

COMMON PURPLE—Extra strong, 85c each.

MOUNTAIN ASH—Any location; 10 feet. A favorite small tree or shrub bearing large orange-red berries the size of a cherry with deeply cut foliage like a pepper tree. Beautifully decorative and highly recommended by us. Extra large stock to give immediate results, 3 years old, \$2.00 each.

PHILADELPHUS—(Mock Orange)—Shade or any location; 8 to 10 feet. Very well known as Syringa or Mock Orange. The single white flowers borne in clusters at the end of every growth are so fragrant one is reminded of orange blossoms. Easily grown in sun or shade. Good healthy bushes at 75c each.

POMEGRANATE—Part or full sun; 10 to 15 feet. A particularly fine shrub of easiest culture. Brilliant double scarlet flowers all through the summer followed by fruit. Foliage glossy and beautiful with ruddy tints on new growth. Sturdy stock, 3 to 4 feet, for 75c each.

QUINCE—(Japanese Flowering)—Partial shade; 4 feet. A favorite old-time shrub profusely set with single brilliant brightest red flowers before the foliage appears in the spring followed by the most attractive reddish-green foliage. 2 to 3 feet, 75c each; extra bushy are \$1.50 each.

SNOWBALL—Any location; 6 to 10 feet. Can be used as a small tree or trimmed as shrub. Produces clusters of 3 or 4 large balls of white flowers in wonderful profusion during May and June. Good sturdy trees, 2½ to 3 feet, are 75c each.

SNOWBERRY—Any location; 4 feet. An attractive native shrub, bearing small pink flowers followed by very unique clusters of pure white berries at the end of gracefully bent branches. Bushy stock, 60c each.



SPIREAS

A wealth of bloom in the early spring

SPIREA—Any location; 4 to 5 feet. Every garden should have a specimen or two. We know of no shrub of more graceful growth or so generally satisfactory.

Van Houttei—(Single Bridal Wreath)—Most popular sort. Making compact growth and throwing out long sprays of graceful foliage which droops to the ground. Covered with a wealth of small white flowers in April.

Prunifolia—(Double Bridal Wreath)—Similar in habit with tiny double rose-shaped blooms flowering profusely in May.

Bushy stock, 2 to 3 feet, either kind, 75c each.

TAMARIX AFRICANA—Sunny location; 10 to 15 feet. We often are asked to name this beautiful feathery foliage shrub of slender gracefully drooping growth. Covered with very tiny lavender-pink bloom as fine as a mist during May. Extra large specimens at 75c and \$1.00.



WEIGELIA—Any location; 6 to 8 feet. Strikingly beautiful when in full flower, and especially valuable for their long blooming period, commencing usually after the lilacs are past. Trumpet-shaped flowers in large clusters about the branches.

EVA RATHKE—Very free blooming, vigorous and erect grower. The flowers are a rich deep crimson, blooming continuously throughout the summer and fall.

ROSEA—Standard sort producing beautiful deep pink trumpet-shaped blooms in May and June.

VARIEGATED—Handsome variegated green and white foliage with rose-colored flowers. Very distinct.

Healthy strong specimen of any variety at 75c each.

HARDY EVERGREEN TREES AND SHRUBS

We offer good well grown specimens consistent with prices quoted. Experience has taught us the advisability of only cataloguing well established pot grown or field grown stock. Results is what everyone wants and we feel that each value offered below is the best the market affords.

ACACIAS—Sunny locations best; partial, O. K. We recommend Acacias for their fast healthy habits. Indispensable for tree specimens and shrubs, flowering well under all conditions. These are the best in our opinion.

BAILEYANA—20 to 25-foot tree. A fine specimen of the same tree with feathery silvery blue-green foliage. Beautiful large clusters of lemon-yellow flowers in January. Pot grown, 4 feet, \$1.25; 5 feet, \$2.00 each.

CULTIFORMIS—6 to 8-foot shrub. Generally trimmed to form a shrub. Three-cornered small foliage. Deep yellow flowers, blooming for a long period.

Pot grown, bushy plants, 75c each.

LATIFOLIA—20 to 25-foot tree or 4 to 8-foot shrub. Often used as sidewalk tree and can be trimmed to form a dense hedge. Long, glossy deep green leaves.

Pot grown, 4 feet, 75c; 5 feet, \$1.00 each.

MELANOXYLON—(Blackwood Tree)—30 to 60-foot tree. Especially recommended as a sidewalk or park specimen. Fast and vigorous in growth. Can be trimmed to form fine specimens.

Pot grown, 4 feet, 75c; 6 feet, \$1.25 each.

MOLLISSIMA—30 to 50-foot tree. One of the finest with dark green feathery foliage and large racemes of deep golden yellow flowers so popular in January.

Pot grown, 4 feet, 85c; 5 feet, \$1.25 each.

ARMATA—8 to 10-foot shrub. Of dense spreading habit, somewhat thorny with small deep green foliage and yellow flowers.

Pot grown, bushy plants, 75c each.

Specimens Tree Acacias, 7.

AURICARIA —
EXCELSA —

(Norfolk Island Pine)—30 to 50 feet. A handsome specimen tree for lawns that grows perfectly pyramidal. Soft dark green foliage branching in regular whorls at several feet intervals. \$2.00 and \$3.00 each.

IMBRICATA —
(Monkey Puzzle Tree)—30 to 50 feet. Also perfect pyramid. Foliage very prickly and sharp formed on round spikes as thick as a wrist. Good specimens are \$2.00 and \$3.00 each.



AUCUBA—(Gold Dust Tree)—Partial or full shade; 5 feet. Handsome yellow spotted large foliage pot plant or outdoor small shrub often producing large bright scarlet berries in fall. Fine for indoor or porch decoration. Strong pots, \$1.00 and \$1.50.

BAMBOO—Partial or full sun; 8 to 10 feet. Aurea. Slender, graceful shoots with narrow delicate foliage and of rather bushy growth. The best and easiest of the Bamboos to grow. Extra heavy clumps at 75c and \$1.00

BERBERIS—(Barberry)—Partial or full shade.

Darwinii—3 to 4 feet. A densely branched and spreading shrub with small holly-like leaves, fragrant orange-yellow flowers followed by purple fruit. 75c and \$1.00.

Wilsonii—2 feet. Small grassy-green leaves and long. For other varieties see page 67.

BUDDLEIA —

—Part or sunny; 6 to 10 feet.

VARIABILIS
MAGNIFICA —
(Butterfly Shrub)
(Summer Lilac)

—One of the most desirable shrubs, beginning to bloom in July and on till cut by frost. The flowers are a pleasing violet-mauve and borne in dense cylindrical spikes 10 to 15 inches in length. Always admired and especially recommended by us. Strong plants at 75c each.

GLOBOSA—4 to 6 feet. Ball shaped orange-yellow blooms about ½ inch in size in clusters at the end of the branches. Trimming forms dense pretty growth. Extra strong, 75c each.



BUDDLEIA VARIABILIS
THE "BUTTERFLY SHRUB"

BROOMS—(Cytisus)—Sunny or partial. Free flowering ornamental shrubs that are especially drought-resistant, thriving everywhere on any kind of soil.

SPANISH—8 to 10 feet. Round upright growth. Deep yellow pea-shaped flowers in wonderful profusion during spring and summer months on long drooping round leafless branches. 50c and \$1.00 each.

SCOTCH—6 to 8 feet. Of same habit but of somewhat leafy growth and rough edged branches. Beautiful yellow flowers. 50c and 75c each.

ANDREANA—6 to 8 feet. Similar to Scotch but distinctly rare and effective because of its golden-yellow flowers with purplish-crimson wings. 75c and \$1.00 each.

WHITE PORTUGAL—4 to 6 feet. The Portuguese white broom is very effective and distinguished by its masses of white pea-shaped flowers. Very bushy plants, \$1.00 and \$1.25.

CALLISTEMON—(Bottle Brush)—Part or full sun. A very effective shrub with deep red flowers resembling that household necessity, the bottle brush. Drought resisting. 75c and \$1.00 each.

CEDRUS—(Cedar)—Any location.

Deodora, Indian or Himalayan—40 to 60 feet. Handsome drooping pyramidal growth with beautiful silvery-green foliage. One of the finest lawns specimens we know of and very popular. Potted, 1 to 1½ feet, \$1.00 each. Other varieties upon application.

CHOISA TERNATA—(Mexican Orange)—Any location; 5 to 8 feet. We especially recommend this shrub because of its healthy glossy dark green foliage enhanced by clusters of very sweet orange bud fragrance white flowers at the end of every branch throughout the year. Very desirable for hedges or single specimens. Potted plants, 60c and 75c each; large specimens, \$1.50 each.

COPROSMA—Any location.

Baueriana—4 to 8 feet. Very glossy deep green rounded leaves. Can be trained as a wall covering or a specimen shrub. This is very often planted in the bay counties. Strong stock at 60c or 75c each.

HERE ARE SOME BEAUTIFUL BERRY SHRUBS

COTONEASTER—Any location. Highly ornamental shrubs with orange or red berries decorating its artistic foliage for many months. By all means consider this valuable group for your planting scheme.

MICROPHILLA—Any location; 6 to 8 inches. Splendid for low walls, rock work, terraces, etc. Foliage is small, of a deep green and in fall is covered with bright red berries that remain for a long period. Extra strong plants, 50c or 75c each.

HORIZONTALIS—Any location; 1½ to 2 feet. Useful for same purposes as Microphilla and especially suitable as single specimen in tubs. Partially deciduous. Small pinkish-white flowers. Fine specimens, 75c and \$1.00.

FRANCHETI—Any location; 8 feet. A graceful type of upright growth with shapely overhanging or arching branches. Reverse of leaves are downy. Flowers pink, followed by yellowish-red berries. Potted, 60c; balled, \$2.00.

PANNOSA—Any location; 10 feet. A fine shrub of upright growth. Long slender arching branches covered with scarlet berries in the fall. Deep green leaves, reverse silver colored. Potted, 50c and \$1.25 each.

CRATAEGUS—(Burning Bush)—Any location. These comprise the larger and most showy of the beautiful berry shrubs. All are extra strong, healthy growers and should have a place in every garden.

PYRACANTHA LALANDI—20 feet. A thick thorny shrub with small glossy deep green leaves, producing quantities of small white flowers succeeded by masses of brilliant orange berries. Potted, 75c and \$1.00 each. Heavy stock at \$1.50 each.

PYRACANTHA CRENULATA—10 feet. Of very dense habit and one of the best. Berries are deep scarlet produced during August in large clusters. Potted, 60c each; large specimens at \$1.00, \$1.50 and \$2.00 each.

PYRACANTHA AUGUSTIFOLIA—8 to 10 feet. This is our favorite of the berry shrubs. Covered with large clusters of flattened orange-yellow berries throughout the winter. Leaves are long and narrow, deep green with gray undersides. Be sure to include one in your garden. Strong specimens, 75c, \$1.25 and \$2.00.

DIOSMA—(Breath of Heaven)—Any location; 3 to 5 feet. Found in nearly every old-fashioned garden. Cherished for its wonderful refreshing sharp fragrance, accentuated by crushing its foliage. The little white starry flowers come in wonderful profusion for a long season. Bushy plants at 50c, 75c and \$1.00 each.

CYPRESS—Italian—(Pyramidalis)—Impressive, dignified and very formal describes this tall, tapering Cypress, chiefly used in formal landscaping. However, any home can use a pair to advantage for entrances or to relieve a bare wall. 3 feet, \$1.50 each; 4 feet, \$2.00 each; 5 feet, \$4.50 each.

Monterey—(Macrocarpa)—Very extensively planted as the common California Cypress. Drought resistant. Makes a wonderful fast-growing hedge or windbreak. Transplanted from flats, \$3.50 per 100; 2½ to 3 feet, 40c each; 3½ to 4 feet, 60c each.

ESCALLONIA—Any location. Anyone can get fine results with these hardy evergreen shrubs, producing large terminal sprays of flowers all summer. The foliage is especially clean and glossy in appearance.

Bertiana White—8 to 10 feet. Very free flowering and of erect growth. The terminals gracefully bending when in full flower. Extra bushy stock, 75c each.

Rosea—6 feet. Beautiful soft pink. Very handsome. Extra strong plants, 75c each.

Rubra—4 feet. Very deep red and of very compact growth. Extra strong plants, 75c each.

EUONYMOUS—Shade or any location; 4 to 8 feet. Is favorably known and planted around the bay, possessing deep very glossy green leaves, trimming up to any desirable shape. Suitable for single specimens or hedges. 75c and \$1.00 each.

EUCALYPTUS—Any location.

Globulus—(Blue Gum)—50 to 150 feet. The most generally planted of the "Gums" because of its extremely rapid growth and hardiness. Transplanted in boxes, very strong, \$3.00 per 100; \$25.00 per 1,000; potted, 3 to 4 feet, 50c each; \$4.00 per 10.

Ficifolia—(Scarlet Flowering)—20 to 30 feet. Brilliant scarlet flowers in large clusters, set off by heavy large leathery leaves. Hardy only in sections not affected by heavy frosts. Pot grown, \$1.25 each.

Rostrata—(Red Gum)—75 to 150 feet. Outgrows any other varieties in the interior valleys. Transplanted in boxes, \$5.00 per 100; potted, 3 to 4 feet, 75c each.

EUGENIA—Any location; 8 to 10 feet.

Myrtifolia—One of the most beautiful compact foliage trees of very neat growth. Old foliage is deep green and new leaves have reddish-brown cast. Creamy white flowers followed by purple berries. Good specimens at \$1.00 and \$1.50 each.

GENISTA—Sun or partial; 3 to 5 feet.

Fragrans—One of our most popular and freest flowering small shrubs. Its yellow pea-shaped flowers blossom under most adverse conditions all year. Strong bushy pots at 75c, \$1.00 and \$1.50 each.

GREVILLEA—ROBUSTA—(Australian Silk Oak)—40 to 60 feet. Very graceful fernlike-foliaged evergreen tree of rapid growth. Covered with bronzy yellow flowers in early summer. Attractive and very uncommon. 3 to 4 feet, 75c each.

HEATHER—(Ericas)—Part or full shade; 3 to 4 feet. Heathers do exceedingly well about the bay, particularly in our fog belts. We have especially fine stocks at very good values.

MEDITERRANEAN—(Bright Pink)—3 to 4 feet. This is the most popular variety. Very compact and regular growth, producing deep bright lavender pink flowers in the early and late spring. Sturdy potted plants at 50c and 75c; balled, extra bushy, \$1.00 and \$1.50 each.

MELANANTHERA—(Delicate Light Pink)—3 to 4 feet. Of more graceful and airy effect, yet compact in growth. Flowers are a very delicate lavender pink produced on long handsome sprays. Splendid for cutting. Pots at 75c each; balled, extra bushy, \$1.00 and \$1.50 each.

TRIUMPHANS—(Pure White)—3 to 4 feet. Similar to Melanthera, with very tiny pure white flowers. Strong potted plants at 75c each.

HOLLY—(European or English)—The original Christmas berry sort with bright lustrous foliage and sharp thorns carrying the beautiful bright scarlet berries during the holidays. Nicely shaped specimens, 1 to 1½ feet, \$1.50; 2 to 2½ feet, \$2.50 each.

HYDRANGEA HORTENSIS—Part or full shade; 4 to 5 feet. The well known large leaved variety with huge heads of lavender pink flowers all summer. Strong plants for 40c, 50c, 75c and \$1.50 each.

HYPERICUM MOSERIANUM—Part or full shade; 16 inches. Splendid border or bedding plants of low shrubby growth, covered most of the year with single golden yellow flowers 2½ inches in size, conspicuously set off by many long yellow stamens tipped brownish red. 50c or 75c each.

LAURISTINUS—Any location; 6 to 10 feet. One of the hedge shrubs, covered in the spring and winter with masses of reddish buds which open pure white. Can be trimmed to any shape. Deep green leaves are always bright. 5-inch pots, 40c each; balled, 75c each.

LEONOTIS—(Lion's Tail)—Sunny, 6 feet. Bright orange flowers are borne in whorls around the branches during the summer and fall. Very unique and easily cultivated. Strong plants at 50c and 75c each.

MYRTLE—(Myrtus Communis)—A beautiful glossy green shrub of very dense growth, producing small fragrant single white flowers throughout the summer. Potted plants at 50c, 75c and \$1.25 each.

OLEANDERS—Sunny; 10 to 15 feet. Grows to perfection in the warmer sections of the bay counties and our interior valleys. Long narrow deep green foliage and a wonderful profusion of fragrant flowers in large clusters. Double white, pink or red, 3 to 4 feet, at \$1.50 each; 2 to 3 feet, \$1.00 each.

PALMS—We have fine specimens of the best varieties at all times. In our estimation Palms are among the most satisfactory shrubs for planting in any location in this vicinity.

DRACAENA—(Dragon Palm)—15 to 20 feet. Very long narrow spear-shaped leaves set closely in large compact bunches crowning a long straight clean trunk. Very desirable for sidewalk use. Potted plants, 1½ to 2 feet, \$1.25 each; balled, 2½ to 3 feet, \$1.50 each.

CHAMAEROPS EXCELSA—15 to 25 feet. Fan-shaped, very dark green leaves. Trunk becomes very hairy and black as the palms get older. Very symmetrical and satisfactory for sidewalk curb use. Balled, 1½ feet, \$2.00; 2½ feet, \$3.00.

PHOENIX CANARIENSIS—(Date Palm)—25 to 40 feet. This is the commonly used variety with long drooping or arching branches radiating from its barrel-shaped trunk. Semi-tropical and majestic in appearance, we are pleased to recommend this sort. Very hardy. Specimens at \$1.00, \$1.50, \$2.50 and \$5.00. Approximately \$1.00 per foot.

WASHINGTONIA FILIFERA—40 to 80 feet. Very handsome large fan-shaped leaves, the true California Fan Palm. The leaves are of a light green with tiny thread-like filaments in evidence. Balled specimens at \$1.50, \$2.50 and \$4.00. Approximately \$1.00 per foot.

PINES—Any location.

MONTEREY OR COMMON—40 to 60-foot tree; 6 to 10-foot hedge. The most useful pine for windbreaks or dense hedge work and very ornamental as a single specimen. Transplanted from flats, \$7.50 per 100; potted, 3 to 4 feet, \$1.00 each.

PITTISPORUM—Hedge; 4 to 6 feet.

Nigricans—Small foliated sort with black stems. Exceedingly fine for hedges or windbreaks. Transplanted from flats at 75c per dozen; \$5.00 per 100.

PRIVET—(Ligustrum Ovaliforum)—Any location; 4 to 6 feet.

CALIFORNIA PRIVET—4 to 6 feet. *Without question we will recommend this wonderfully fast growing deep green shrub for hedge purposes. Drought resisting, thriving under adverse conditions, we are enthusiastic over the many satisfactory reports we have from our customers. We have an especially fine stock to offer this season. 3½ to 4 feet at \$15.00 per 100. Set these out about 18 to 24 inches apart for immediate results.*

GOLDEN OR YELLOW PRIVET—4 to 6 feet. Identical except for its beautiful yellow foliage. 50c and 75c each.

RHODODENDROMS—Partial shade; 6 to 10 feet. We have access to a fine collection of these remarkably beautiful evergreen shrubs, producing large tight heads of single bell-shaped flowers in many orchid and solid colors. Choice specimens from \$4.00 to \$10.00 each.

SEQUOIA SEMPERVIRENS—(Redwood)—150 feet. Our common Coast Redwood is very ornamental and easily established from our potted stock. We do not hesitate in recommending it as one of the very best for specimen or avenue planting. Specimens, \$1.50 each, 3 feet.

SEQUOIA GIGANTEA—(Calif. Big Tree)—200 to 300 feet. The "Grand Daddy of Them All." Our most famous Big Tree Groves are known the world over, predeceasing the Glacial Period. Makes a very handsome pyramidal growth. Specimens, 2½ to 3 feet for \$2.00 each.

STRAWBERRY TREE—(Arbutus Unedo)—Large red fruits, similar in size and shape of a strawberry, succeeding the pretty single white flowers during the winter. Makes an attractive well-branched shrub with handsome deep green foliage as well as fruiting. Strong potted stock, 1 to 1½ feet, \$1.00 each.

VERONICA—Every location. Extremely valuable glossy foliage shrubs and very generally planted everywhere. The bottle-brush-shaped flowers are produced at all seasons.

Decussata—3 to 4 feet. Flowers large, violet blue. Leaves medium sized and closely set. Rather dwarf and very dense growth. Fine for bedding and makes beautiful low hedge. Potted, 1 foot, 35c each; specimens, 50c, 75c and \$1.00 each.

Imperialis—4 to 5 feet. Large deep red spikes and deep green foliage with purple shadings. Strong grower and very handsome. Specimens at 50c, 75c and \$1.00 each.

Variegata—5 to 6 feet. Very attractive by its large, glossy conspicuously variegated green and creamy white foliage. Flowers are a beautiful lavender blue. One of the best variegated shrubs. Fine specimens at 50c, 75c and \$1.00 each.

DECIDUOUS SHADE AND ORNAMENTAL TREES

Are indispensable in the interior part of our state. However, they should be more generally planted in the bay regions for the wonderful effect and complete change they give to a landscape in a few years. In our estimation the following varieties are best suited for this vicinity:

ERECT SHAPE OR GROWTH

- BIRCH**—(Erect Type)—European White; 35 to 40 feet. A rapid growing slender tree with silvery white bark and drooping branches. 6 to 8 feet. \$1.50 each.
- BEECH**—(Purple Leaved)—40 to 60 feet. A most beautiful tree with deep purple foliage in the spring, changing to deep crimson in the fall. Good specimens at \$2.50 and \$4.00 each.
- ELM**—80 to 100 feet. Magnificent large tree with drooping spreading branches. Large leaved and rapid growth. 6 to 8 feet, \$1.50 each.
- LINDEN OR BASSWOOD**—60 feet. A rapid growing large sized tree forming a broad round-topped crown. Large oval leaves and fragrant creamy-white flowers. 6 feet, \$1.25.
- LOCUST**—40 to 50 feet. Strong growing trees with deep cut foliage, bearing drooping clusters of flowers that are very fragrant. Pink or white flowering, 8 feet, \$2.00 each.
- MAPLES**—Silver or soft. 75 to 100 feet. Strong rapid grower. Bark is light colored and smooth. Leaves are a beautiful green on the upper side and silver underneath. 6 feet, \$1.00 each.
- NORWAY**—75 to 90 feet. Large and handsome compact growth. Fine deep green foliage. 6 feet, \$1.50 each.
- POPULAR**—(Lombardy)—Very upright in habit. Strong vigorous grower. Originated in Lombardy, Italy. 6 to 8 feet, \$1.00; 7 to 9 feet, \$2.00.
- BALM OF GILEAD**—60 to 80 feet. Handsome tall tree with spreading branches. Of very rapid growth. Large heart-shaped green leaves. 6 to 8 feet, \$1.50 each.
- SYCAMORE**—One of the best street types. Of spreading habit, forming a nice crown. Large dark green foliage. 6 to 8 feet, \$1.25 each.
- WALNUT**—(Juglans)—60 to 80 feet. The common black walnut makes a most beautiful tree. Gracefully cut foliage of bright green. Strong trees at 75c each and \$1.00 each.

WEeping OR DROOPING HABITS

- BIRCH**—Cut-leaved, weeping; 40 to 50 feet. Has silvery white bark and slender drooping branches with deep cut foliage. 6 to 8 feet, \$2.00 each.
- CHERRY WEEPING**—8 feet....One of the handsomest of all ornamentals. Flowering very freely at "Cherry time," exciting admiration because of its unique weeping habit. 4 to 5 feet, \$2.50 each.
- WILLOW WEEPING**—40 to 50 feet. Best known of all weeping trees. Requires a moist location. Of very easy growth. 3 to 4 feet, 75c each.
- MULBERRY TEA'S WEEPING**—10 to 12 feet. One of the most beautiful weeping trees. Its slender branches drooping to the ground from a crown that soon becomes high enough to walk under. Specimens at \$3.00 each.

FLOWERING AND ORNAMENTAL FRUIT TREES

- ALMOND**—10 feet. First tree to bloom in spring, flowering before the foliage arrives. Very beautiful double pink flowers in profusion. 4 to 5 feet, \$1.00 each.
- APPLE**—(Crabapple)—10 feet. Flowers are deep purplish red in bud, opening to a very beautiful semi-double, clear shell pink. A good robust grower. Extra well branched, 4 to 5 feet, \$1.50 each.
- CHERRY**—10 feet. Very large clusters of double rose-shaped white flowers before leaves appear. Strong 4 to 5 feet trees at \$2.00 each.
- PEACH**—10 to 15 feet. Covered with wonderful masses of peach blossoms during April before the leaves appear. Double white, double pink, double red. 4 to 5 feet, \$1.25 each.
- PLUM**—15 to 20 feet. New foliage is bright crimson, turning to dark purple and remaining this color until they drop in the fall. 4 to 6 feet, \$1.25.

POTTED CYCLAMEN IN BLOOM



SPECIAL OFFERING—HOUSE PLANTS

Choice specimen plants of every house or conservatory plant listed below. We will more than satisfy your expectations at our price, properly packed to go anywhere. BY EXPRESS ONLY.

- ASPIDISTRAS**—\$1.00, \$1.50, \$3.00.
- ASPARAGUS PLUMOSUS**—35c, 50c, 75c.
- ASPARAGUS SPRENGERI**—35c 50c, 75c.
- PALMS, KENTIA OR HOUSE**—\$1.25, \$2.00.
- LOTUS PELIOCHORNIS**—50c, 75c.
- LEOPARD PLANT**—75c, \$1.25.
- CYCLAMEN**—75c, \$1.50.
- WANDERING JUBE OR JEW**—In colors, 35c.
- BOSTON HOUSE FERNS**—\$1.25, \$1.75, \$3.00.
- LACE FERN**—\$1.50, \$2.50.
- HANGING BASKETS OF SPRENGERI**—\$3.00 special.
- HANGING BASKETS**—(Mixed)—\$3.00 special.

BEST HARDY CLIMBING VINES

Ampelopsis Veitchii—(Boston Ivy)—Small leaves, glossy green, turning to autumn bronzes in fall. Clings tightly of own accord. Strong potted plants at 50c and 75c each.

Quinquefolia—(Virginia Creeper)—Very fast, large leaved variety requiring some support. Strong roots, 50c each.

AUSTRALIAN PEA VINE—Small heart-shaped, bright green leaves and quantities of pink pea-shaped flowers. Potted, 35c each; 3 for \$1.00.

BIGNONIA—(Trumpet Vine)—Beautiful large showy trumpet-shaped flowers for warm and sheltered locations.

Cherere—Rich blood red. Strong plants, 75c each.

Grandiflora—Common bright scarlet. Extra strong, potted, 75c each.

BOUGAINVILLEA—Beautiful rosy purple flowers in wonderful profusion for a long season. Best in a warm, sheltered location. Only large plants such as we offer give quick results. Potted, \$1.00 and \$2.00 each.

CLEMATIS—By our illustration you may judge the remarkable beauty of these hardy vigorous climbers.

Paniculata—Freest flowering with small starry flowers about an inch in size. Strong potted stock at 75c each.

Montana—Larger single white flowers. Strong plants at 60c each.

CLIANTHUS PUNICEUS—(Parrots' Bill)—Very odd orange-scarlet flowers with fern-like foliage. 75c each.

FICUS REPENS—(Climbing Fig)—Very deep green, small heart-shaped leaves; they adhere very tightly to stone or wood. 50c and 75c each.

HONEYSUCKLE HALLEANA—(Hall's Japanese)—Strongest and most vigorous evergreen sort. Most popular. Flowers are yellow and white. Our plants are extra value at 50c and 75c each.

IVY, ENGLISH—(Hedera Helix)—Old fashioned, thick leathery shining leaves. Valuable for ground cover, walls or covering tree trunks. 25c each; \$2.00 for 10; larger, potted at 50c each.



Bougainvilleas are Especially Fast, Brilliant Climbers.



CLEMATIS PANICULATA IN FULL BLOOM

JASMINE—(Officinalis)—(True Jasmine)—Old fashioned sweet scented white flowers produced in clusters in the early spring. 60c each.

Primulinum—(Double Yellow)—Fastest growing Jasmine with very double yellow flowers. 60c each.

Revolutum—(Single Yellow)—Strong grower throwing flowers all summer. 60c each.

LANTANA—(Climbing Verbena)—Very pretty evergreen climbers with verbena-like clusters of flowers in various colors, orange and yellow, pink, lavender. 4 in pots, 35c; the three colors for \$1.00.

MATTRESS VINE—(Muehlenbeckia)—Very small maiden-hair fern-like foliage, growing into a very dense growth in a short time. Fine for fence hedges or covering trees or unsightly places quickly. Potted, 40c each. \$3.50 per 10; extra large at 50c each.

PASSION VINE—(Passiflora)—Very popular rapid growing evergreen climbers, with large fig-shaped bright green leaves and bright colored flowers. Pink—Brilliant bright pink, 60c each. Scarlet—Very intense and brilliant, 60c each. Purple—Fine pleasing shade, 60c each.

PLUMBAGO CAPENSIS—Clusters of most beautiful light clear blue. One of the finest, quick-growing dense climbers we grow. Potted, 60 or 75c each.

SOLANUM—(Potato Vine)—Very fast growing vine with star-shaped flowers shading purple at center. Leaves narrow and dark green. Strong plants at 50c each.

WISTARIA—Extremely popular and well known strong Japanese climbers, producing quantities of long gracefully drooping clusters of flowers in the early spring, resembling long bunches of grapes. Purple—strong 2 year plants, \$1.50 each; white, strong 2 year plants, \$1.50

The Rose

BUDDED ROSES

Budded roses grow far more vigorously than those on their own root and are longer lived; so that the slight additional expense incurred to begin with, is more than compensated in having superior plants. The only possible objection—claimed by some—is that the plants are apt to sucker. We avoid this by dis-budding the stock, making this possibility nil. As a further preventative we recommend that our customers plant the junction of the bud with the stock two or three inches under ground. If planters will observe to do this, the plants will make a better root system, and all possible difficulty of suckering will be removed.



CULTURE

The rose loves a deep rich heavy soil even inclined to adobe. In such soils the growth is strong and vigorous and the flowers have great substance. But even in a light, sandy soil, roses can be made to grow well and they flower as a rule earlier than in heavy soil. To improve light soils, add clay, Holland peat, or adobe, and use cow manure as a fertilizer rather than horse manure which is more suitable for heavy land.

By our careful system of balling and potting, roses can be planted at any time of the year; but the safest time to plant bare root bushes is from December to March. Both heads and roots of bare-root plants must be cut back before planting and thoroughly soaked with water afterwards. Should the roots appear to be dry on arrival, mix up some soil and water and "puddle" the roots in it for a couple of hours before planting. This closes the pores of the roots temporarily and to some extent prevents loss of sap through evaporation, a most important point. In planting, thoroughly soak the soil down before adding the last or surface soil. This insures every portion of the root being thoroughly covered and prevents cracking of the surface owing to the top soil being loosely placed. Frequent hoeing or cultivating of the surface soil is absolutely necessary, to keep this loose soil or "mulch" on the surface. Especially is it necessary after watering.

On long-distance Express shipments we "ball" the plant out of the pot (unless otherwise ordered), to save customers transportation charges. Roses balled by our method will weigh on the average 4½ pounds: naked roots 1 to 1½ pounds. Customers selecting their own roses are respectfully requested to add to the orders a few supplementary varieties, lest, by previous orders, the stock of any particular variety should be exhausted.

Abbreviations: T., means Tea Roses; H. T., means Hybrid Tea; H. P., Hybrid Perpetuals; Pol. Polyantha (Baby Roses).

TREE ROSES

Tree Roses, known also as Standard Roses, are very imposing when planted among shrubbery and occupy very little ground space.

These Tree Roses are produced by budding on a tall stem about three feet from the ground; the variety desired. We select the most vigorous and hardiest sorts, keeping in view the selection of best colors and most constant bloomers.

Specimens, 3½ to 4 feet, \$2.00 each, by express.

BELLE SIEBRECHT—Bright pink.
FRAU KARL DRUSCHKI—Snow white.
GEN. McARTHUR—Fiery red.
HOOSIER BEAUTY—Dazzling crimson scarlet.
IRISH FIREFLAME—Old Gold and crimson.
JULIET—Old gold and rosy red.
LADY HILLINGDON—Deep orange yellow.
LOS ANGELES—Flame pink and gold.
LYON—Coral red shaded chrome yellow.
MAD CAROLINE TESTOUT—Silvery rose.
MAD EDOUARD HERRIOT—Coral red and yellow.
MISS KATE MOULTON—Clear pink.
MRS. AARON WARD—Indian yellow and salmon.
MRS. CHARLES RUSSELL—Rosy carmine.
OPHELIA—Salmon flesh.
PAPA GONTIER—Rosy crimson.
RAINBOW—Pink striped crimson.
SUNBURST—Cadmium yellow.
ULRICH BRUNER—Cherry red.

HARDY CLIMBING ROSES

2 years old—field grown,

75c each, postpaid; 6 for \$3.75, postpaid.

AMERICAN PILLAR—A single-flowering variety of great beauty. The cluster flowers are of large size, 3 to 4 inches across, of a lovely shade of pink, with a clear white eye and cluster of yellow stamens.

BANKSIA, DOUBLE WHITE—(Ban.)—Tiny, pure white, and very double; borne in large clusters. Branches long and thornless.

BANKSIA, YELLOW—(Ban.)—Very tiny double; flowers of a bright buff yellow color.

BEAUTY OF GLAZENWOOD—(Misc.)—San Rafael rose. A vigorous fast climber sending forth a mass of bloom in the early spring, being a combination of copper, carmine and salmon yellow.

CAROLINE GOODRICH—(H. P.)—Light red, very fragrant.

CHEROKEE, SINGLE—(Misc.)—A beautiful pure white rose, large, clear white, single flowers, full of bright yellow stamens, foliage dark rich green.

CLIMBING AMERICAN BEAUTY—(Wich. Hybrid)—Glowing crimson. The flowers are large, fragrant and foliage very heavy; free from mildew.

CLIMBING BELLE SIEBRECHT—(H. T.)—One of the very best climbers in our list. In color it is a solid cerise pink. The flower is beautiful in bud, and when full blown. Very fragrant.

CLIMBING CAROLINE TESTOUT—(H. T.)—This most wonderful rose is identical with that most beautiful and very free flowering rose, Madam Caroline Testout, except that it is a very vigorous climber, canes making a growth of 12 feet in a season and an inch through. No garden should be without this magnificent rose. Clear pink.

CLIMBING KAISERIN AUGUSTA VICTORIA—(H. T.)—One of the very best climbing white roses; buds long and pointed; deliciously fragrant.

CLIMBING LA FRANCE—(H. T.)—A sport from the La France, resembling it in every particular. A strong rapid grower, producing large delicate, silvery-pink flowers in great abundance.

CLIMBING Mlle. CECILE BRUNNER—(Poly.)—An exact counterpart of the great favorite bush rose of the same name, except that it is a very much stronger grower. Flowers perfectly double, rosy pink, petals in bud daintily reflexed. Delightfully fragrant and in every respect a most exquisite rose. A vigorous climber.

CLIMBING PAPA GONTIER—(T.)—A vigorous grower with beautifully formed buds. Color rosy crimson.

CLIMBING PERLE DES JARDINS—(T.)—A strong growing form of its parent Perle des Jardins. In color, it is a deep golden yellow.

CLIMBING WOOTON—(H. T.)—Velvety red. A strong rampant climber, producing in wonderful profusion, superbly formed flowers, with thick leathery petals, which are deliciously scented.

CLOTH OF GOLD—(N.)—Deep yellow center, edges sulphur, very sweet scented; a magnificent variety.

CRIMSON RAMBLER—This was the first of the Rambler Roses, and was introduced from Japan in 1894. It is too well known to require description. Everyone is familiar with its large clusters of crimson flowers.

DOROTHY PERKINS—(Wich.)—Clear shell-pink flowers profusely borne in numerous clusters full and double, with crinkled petals. Leaves bright green and very persistent. A grand rose for training or for ground work.

DR. W. VAN FLEET—A rose, which on account of its dainty color and exquisitely shaped buds and flowers, appeals to everyone. The long pointed buds are of a rich flesh-pink on stems 12 to 18 inches long; splendid for cutting. Price \$1.00 each.

EXCELSA—A distinct variety in form, color and habit; vigorous in growth, with healthy dark glossy green foliage. The flowers are very double, produced in large trusses. The color is intense crimson.

GRUSS AN TEPLITZ—(Bour.)—There is positively no better rose grown for hedge purposes than the Gruss an Teplitz. It is a vigorous grower and when properly trained makes an almost compact hedge. The flowers when first opened are rich dark crimson, changing to velvety fiery red. It is a strong grower and blooms continuously, and is delightfully fragrant.

GOLD OF OPHIR—(N.)—Apricot-yellow. A medium-sized rose, blooming in clusters. A vigorous climber.

HIAWATHA—There is no other climbing rose so brilliant as Hiawatha. A brilliant, ruby-carmine, with a clear white eye and a mass of golden stamens.

LAMARQUE—(N.)—The flowers are pure white, sulphur-yellow center; and are borne in large clusters. It is a rampant climber.

MARECHAL NIEL—(N.)—A strong, rapid climber that bears beautiful golden yellow buds in great profusion. Has a fragrance that is peculiar to this rose alone.

PAULS SCARLET CLIMBER—The flowers of this superb rose are vivid scarlet shaded with bright crimson, and are produced in large clusters of medium-sized semi-double blossoms. The rich color is maintained without burning or fading until the petals fall. Price \$1.00 each.

PINK CHEROKEE—A beautiful single rose of a delicate clear pink color. A vigorous climber with glossy dark green stems.

REINE MARIE HENRIETTE—(H. T.)—Cherry-red. Large, finely formed flowers.

SILVER MOON—Different from all other roses, with beautiful semi-double flowers four and a half inches and over in diameter; pure white in color, petals of great substance, beautifully cupped, forming a Clematis-like flower. The large bunch of yellow stamens in the center adds to its attractiveness.

TAUSENDSCHOEN OR THOUSAND BEAUTIES—(Poly.)—Delicate shaded pink, changing to rosy carmine, blooming in very large clusters.

W. A. RICHARDSON—(N.)—Beautiful orange-yellow; flowers medium but very showy and distinct.

BEST ROSES OF RECENT INTRODUCTION

Strong 2-year-old Plants

COLUMBIA—(H. T.)—This beautiful rose is of strong, vigorous habit of growth and exceptionally free flowering. In color it is a most pleasing shade of rose-pink, and delightfully fragrant. \$1.25 each.

GOLDEN EMBLEM—(H. T.)—A superb new rose, flowers are large and of perfect shape. In color it is a rich deep golden yellow, tinged with coppery orange. It is a perpetual bloomer and sweetly scented. Of free and branching habit with glossy green foliage. Awarded Gold Medal. \$2.00 each.

HOOZIER BEAUTY—(H. T.)—In color it is crimson scarlet with dark shadings, and the petals are of a velvety texture. The buds are long and sweet scented. It is as fragrant as the Richmond. The flowers are very attractive, and are borne on heavy strong canes. It is a splendid garden variety. \$1.00 each.



LOUISE CATHERINE BRESLAU—(H. T.)—Entirely distinct from all other roses: the buds are coral-red shaded with chrome yellow, while the expanded flowers, which are very large, are shrimp-pink shaded coppery orange and chrome yellow. \$1.00 each.

LOS ANGELES—(H. T.)—Produced in California in 1917. Color is luminous flame pink toned with coral and shaded translucent gold at the base of petals. The buds are long and pointed and the rose is intensely fragrant. It is a strong healthy grower, and has good foliage. \$1.25 each.

MME. EDOUARD HERRIOTT—(Daily Mail Rose)—(Per.)—A very strong vigorous grower with spreading, branching habit, and of glossy green foliage. The buds are coral red, shaded yellow at the base. The flowers are in size semi-double and when full blown is a superb coral red shaded with yellow and bright rosy scarlet. 75c each.

OUR SELECTION OF THE FINEST GARDEN ROSES GROWN

We grow only tried and well proven varieties suitable for California conditions, selecting the roses because of its beauty of color, habit of growth and texture of flowers. If your favorite rose is not included we will be very pleased to make an effort to get it for you.

We sell only top grade 2-year-old Budded Roses that in nearly every instance flower very freely the season planted. Shipped in a dormant condition from about December 15th to about April 1st. Potted stock ready after April 1st at 25 cents each rose bush extra.

AMERICAN BEAUTY—(H. P.)—Color rosy crimson; extra large full flowers, exceedingly sweet; makes magnificent buds.

ARTHUR R. GOODWIN—(Per.)—Superb combination of colors being coppery orange, red, and as the flowers expand, poppy to salmon pink. The flowers are large and full. Heavy foliage.

AUSTRIAN COPPER—(H. B.)—Rich coppery red on inside of petals, yellow on outside; single.

BABY DOLL—(Poly.)—Also known as Tiptop. In color it is golden yellow tipped with clear cerise. The foliage is narrow and long, and of a deep, glossy green. Its unique coloring makes it very attractive.

BELLE SIEBRECHT—(H. T.)—A superb rose; the buds are beautifully formed, of long tapering shape and when half blown the petals reflex in a graceful manner; the flowers have great substance and the petals are of heavy texture; color imperial pink.

BLACK PRINCE—(H. P.)—Intensely dark crimson approaching black. Flowers are cup-shaped, large and full.

1 CAROLINE TESTOUT—(H. T.)—Clear pink. One of the best Hybrid Tea roses up to date. It is clear pink and there is nothing in the rose line that can approach it in color; should have a place in every collection.

2 CECILE BRUNNER—(Poly.)—Salmon-pink with deep salmon center, borne in clusters, very small, full and delicately scented; admirable in bud and open flower; a very profuse bloomer.

CHATEAU DE CLOS VOUGEOT—(H. T.)—The color is varied from a deep velvety scarlet shaded to bright red and then to dark velvety crimson, as the flowers expand. Its fragrance is very pronounced.

CLARA WATSON—(H. T.)—A vigorous grower sending up strong canes bearing heavy foliage. The blooms are well formed and are pearly white, center tinted pale peach. A free bloomer.

ETOILE DE FRANCE—(H. T.)—The flowers are very large and borne on good long, stiff stems; color a lovely shade of clear, red-crimson velvet; very fragrant and keeps well. A superb rose and sure to be a great favorite.

3 FRAU KARL DRUSCHKI or SNOW QUEEN—(H. P.)—A remarkably vigorous grower. Its flowers are very large, perfect in form, of the purest snow-white color, with large shell-shaped petals. A very free bloomer.

GEN. JACQUEMINOT—(H. P.)—Bright shining crimson, very rich and velvety, exceedingly brilliant and handsome; makes magnificent buds.

4 GENERAL McARTHUR—(H. T.)—This is probably the greatest favorite of all the garden roses. The flowers are a vivid crimson scarlet and retain their brilliancy when the flowers are fully expanded. Very highly perfumed and practically free from damage by mildew. This we consider one of the best roses in our lists.

GEO. C. WAUD—(H. T.)—Glowing orange-vermillion. Flowers large, full and perfectly formed, with high, pointed center. Stems long, carrying flowers erect. Fragrant. A very fine variety.

GEO. DICKSON—(H. T.)—Deep scarlet shaded velvety crimson. Flowers very large and full, intensely fragrant but a moderate bloomer.

SPECIAL ATTENTION

We Have Numbered the

BEST 12 GARDEN ROSES

For San Francisco and the entire Bay District.

We know every rose sold and we recommend these as the most satisfactory "12."

Extra Strong Budded 2-year-olds.

12 BEST GARDEN ROSES - - - - \$7.50

Delivered anywhere in California by P. P.

HUGH DICKSON—(H. P.)—A vigorous grower, with handsome foliage; sending up strong vigorous canes surmounted with blooms of a brilliant crimson, shaded scarlet; very large and of exquisite form with large smooth petals. A most beautiful rose.

HEINRICH MUNCH—(H. P.)—"Pink Frau Karl Druschki." It has every characteristic of the Druschki except in color it is pink and the petals are beautifully reflexed; a splendid cut flower rose.

5 IRISH ELEGANS—(H. T.)—This is one of the most charming of all the large flowered single roses. The flowers are often five inches across. Its long shaped buds are of a bronzy orange scarlet which assumes an apricot shade as the flowers expand, and is an exquisite rose for indoor decorations.



KATE MOULTON—BEAUTIFUL IN BUD

IRISH FIREFLAME—(H. T.)—Single, old gold or coppery yellow flamed with ruddy crimson. Its beautiful buds remain in shape a long time, having great substance. They are borne on long stems.

JONKHEER J. L. MOCK—(H. T.)—Fine in bud, being full and well formed, and is equally good when it opens up. In color, it is a mixture of bright red and salmon pink.

JULIET—(H. B.)—A distinct variety with large, perfect flowers. The outside of the petals is old gold and the interior rich rosy red, changing to deep rose; very fragrant.

KAISERIN AUGUSTA VICTORIA—(H. T.)—This beautiful rose blooms continuously. It is pure white and its petals are large and of the very best substance. A steady grower and blooms regularly from early spring till late in the fall.

6 KATE MOULTON—(T.)—Beautiful clear pink; the petals, which are recurved, are tipped white; the buds are long and pointed. A vigorous grower and free bloomer.

7 LADY HILLINGDON—(T.)—A grand rose for either pot work or garden decoration. Blooms continuously, buds very long, with a most pleasing shade of orange yellow. Particularly fine in the bud state.

LADY PIRRIE—(H. T.)—Deep coppery reddish salmon, inside of petals apricot-yellow, flushed fawn and copper. A Gold Medal Rose.

LA FRANCE—(H. T.)—Silvery pink. One of the finest of roses; the color is a most lovely rose, with silvery luster; it is a constant bloomer, and very sweet-scented.

LYON—(Per.)—The color of this rose is shrimp pink at end of petals; center coral red or salmon shaded with chrome yellow, highly perfumed.

MAD. ABEL CHATENEY—(H. T.)—A strong grower and a perpetual bloomer. Beautiful in bud; petals are recurved. The color is rose pink, tinged with salmon. One of the most attractive of all the roses.

MAMAN COCHET—(T.)—Rosy pink. A vigorous grower, with beautiful foliage; the bud is long and pointed, borne on long, stiff stems.

MARQUISE DE SINETY—(H. T.)—Buds rich yellow suffused with carmine, becoming deeper as the flower expands; fragrant.

MILDRED GRANT—(H. T.)—Color is pearly white, petals edged pink. Blooms size of Paul Neyron. One of the best of the late introductions.

MISS CYNTHIA FORDE—(H. T.)—Deep brilliant rose color shading on the back of the petals to a light rosy pink. Flowers large and of great substance.

MME. LEON PAINE—(H. T.)—Silvery salmon, center orange-yellow. Buds pointed, flowers large. Free bloomer. Excellent bush with dark glossy foliage.

MRS. AARON WARD—(H. T.)—Long buds borne on erect stems. Flowers large; Indian yellow, suffused with salmon rose.

MRS. CHAS. RUSSELL—This is a strong, healthy grower, the blooms are large, full, having a beautiful shade of rosy pink. A splendid variety for garden planting.

MRS. F. W. VANDERBILT—(H. T.)—The blooms are a deep orange red shaded bronzy apricot red and are very double, medium size and delightfully fragrant.

MRS. GEO. SHAWYER—(H. T.)—A late introduction that rivals Clara Watson. The rose is a beautiful pink or peach pink tinged with white as the flowers expand. The flowers are large, well-formed, the petals good substance; foliage leathery.

8 OPHELIA—(H. T.)—Since its introduction several years ago, it has been growing steadily in public favor. It is a heavy grower and produces flowers in abundance. In color it is salmon pink shaded rose and yellow at the base of petals. A splendid variety for outdoor culture.

9 PAPA GONTIER—(T.)—A magnificent bold flower; finely formed buds, color brilliant carmine, changing to rose and lilac; in brilliance of color fully equal to Gen. Jacqueminot; it is delightfully fragrant and is the most popular rose of its color.

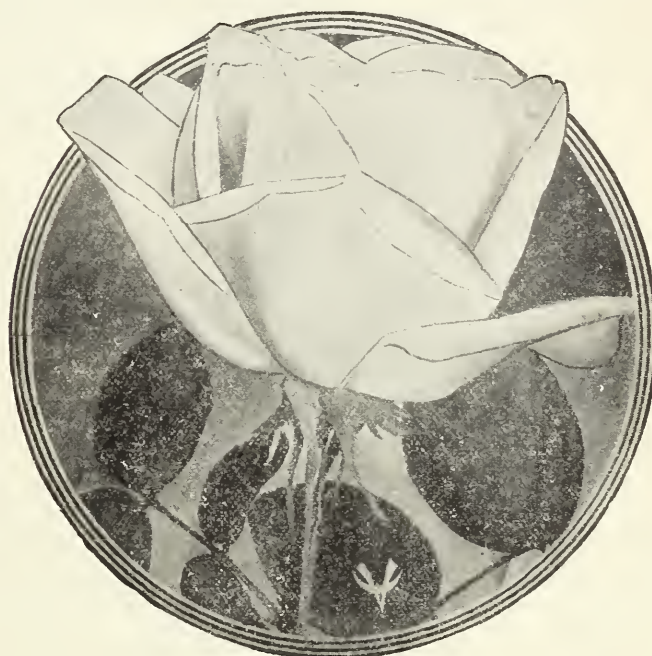
PAUL NEYRON—(H. P.)—This rose produces the largest of all rose blooms. In color, bright salmon pink, very clear, and double; highly scented.

PERLE DES JARDINS—(T.)—Bright straw, sometimes canary color. Very large, full and fragrant and most popular.

PERLE d'OR—(P.)—Salmon tinted pink, flowers come in cluster, a salmon "Baby Rose."

10 RADIANCE—(H. T.)—A very free flowering habit; a strong grower. The flowers are a beautiful blending of shades of carmine rose with opal and carmine reflected, and is very fragrant. It is a very superior variety for garden culture.

RAINBOW IMPROVED—(T.)—Deep pink, penciled and mottled with glowing crimson; base of petals a bright amber color; fine buds; large flowers. Prune sparingly.



OPHELIA
One of the Best for Cutting

RAYON d'OR—(H. T.)—A vigorous grower of fine branching habit, with fine bronzy green foliage and oval-shaped buds; tinged coppery orange. It is not only very attractive in this form, but equally so when the flowers are expanded, on account of its fine substance and magnificent golden yellow coloring.

RICHMOND—(H. T.)—One of the best red roses yet produced. It is a constant bloomer, very fragrant with a color approaching a deep scarlet in tone. It has long pointed buds on tall straight stems with elegant dark foliage.

SEPTEMBER MORN—(H. T.)—The buds are very large and fine form. In color the outer petals are light, flesh pink, rose pink in center and golden yellow at the base.

11 SUNBURST—(H. T.)—Few roses have so many favorable points all combined in one plant. Its bronzy foliage, absence of thorns, its long, pointed, orange-yellow buds, becoming deeper towards the center, carried on long, stiff stems, place it in the front rank among the new roses.

12 ULRICH BRUNNER—(H. P.)—Brilliant cherry red; a very effective color. Flowers fine form and finish, carried well upon the plant. Petals of great substance. A very valuable rose.

WHITE MAMAN COCHET—(T.)—Clear white; the buds are solid, long and pointed, faintly suffused pink on outside. Should not be hard pruned.

YELLOW MAMAN COCHET—(T.)—Light yellow, edged rose.

Prize Winning California DAHLIAS

CULTURE—Dahlia tubers are planted from February 1 until July 1—preferably in May. We recommend planting the tuber on its side at slight angle. Cover the bud end with four inches of soil, pressing or firming the soil well. The usual distance is three feet apart and four feet rows. As the buds appear, water freely and fertilize with a straw manure or Holland peat. Exhibition flowers are encouraged by disbudding, leaving the single crown buds to develop into unusually large blooms. Dig the tubers after frost cuts the foliage down.

PRICES ARE POSTPAID TO 3rd ZONE

CACTUS DAHLIAS

Characterized by long, narrow, pointed, tubular and twisted petals of graded lengths, giving the layered flowers a very striking and attractive appearance. This class presents probably the most striking general appearance, and its varieties are always among the most popularly sought.

P. W. FELLOWES —(C.)—Brilliant orange, very large, fine stem	\$.75
J. H. JACKSON —(C.)—Dark velvety crimson-maroon; strong stems, fine bloomer.....	.35
MARGARET BOUCHON —(C.)—Soft rose, white in the center and white tips, perfect form.....	.35
IVORY —Pure white .....	.50
NEW YORK —Large, perfect exhibition flowers of apricot shaded amber.....	.50
PIERROT —A striking flower of amber, each petal regularly tipped .....	.50
SOVEREIGNTY —A large flower of rich canary yellow .....	.75
SWEET BRIAR —Lovely shade of rose pink.....	.35

HYBRID CACTUS DAHLIAS

The petals are broader than cactus and more twisted. Flowers usually larger.

CLAREMONT, 1921 NOVELTY —Soft rose pink, shades cream. Petals long and twisted, and probably the largest dahlia of this type.....	2.50
GEORGE WALTERS —Salmon and old rose. A large variety with wiry stems.....	.75
GOLDEN WEST —(H. C.)—Old gold color. Fine stems and good keeping flower.....	.50
HELEN DURNBAUGH —White suffused with clear rose pink. One of the most attractive types in this class. Stems stiff and a fine cut flower.....	1.50
JUSTICE BAILEY —A dwarf plant covered with big mauve blooms .....	.50
KALIF —A rich glowing shade of clear scarlet. A strong grower with immense perfect blooms and long, stiff stems.....	.50
LA FAVORITA —A pleasing shade of orange salmon. A flower which is much in demand for decorative purposes	2.00



F. W. FELLOWES

Most beautiful deep orange, 75c each

MRS. EDNA SPENCER —An exquisite shade of orchid lavender and a prize winner in the San Francisco shows	1.50
MRS. RICHARD LOHRMAN —One of the best of its color. Pure rich yellow. Used both as an exhibition and garden flower.....	1.50
MRS. W. C. ESTES —(C.)—The largest and finest pure white dahlia grown. Held high above foliage on strong stems. A prize winner.....	1.50
RUTH GLEADELL —(H. C.)—Soft yellow shading to an apricot-bronze on the outer petals. The immense flower is held erect on a strong stem far above the foliage.....	.75
SAN FRANCISCO —Immense flowers of reddish bronze .....	.75
TOM LUNDY —Very large velvety garnet.....	.50
WODAN —Salmon pink and old rose. A good standard dahlia .....	.35
YELLOW KING —(C.)—Yellow, shading lighter at tips, flowers large and petals wavy.....	.50

COLLARETTE DAHLIAS

The Collarette is the newest introduction in Dahlias. It is a single Dahlia, with a fringe or collar of small petals around the center, hence the name. The stems are stiff and long. For cut flowers they are hard to surpass, lasting nearly a week when cut.

Name the color you wish. Each..... .50

POMPON DAHLIAS

Of small size, but firm, compact and long lasting; invariably with long smooth stems, and blooming with the greatest profusion. Especially good for small bouquets, sprays or dwarf beds.

ANNIE DONCASTER—Yellow base; suffused pearly pink .....	.35
GEORGE IRELAND—Deep lavender.....	.50
GLOW—Old rose or coral.....	.50
HECLA—Pure white, small perfectly shaped flowers....	.50
IDEAL—Canary yellow.....	.50
JOHNNY—Small deep maroon crimson; each.....	.50
KITTY BARRETT—Tiny yellow tipped brown; each .....	.50
LITTLE BEESWING—Golden yellow, heavily tipped cherry red; each.....	.50
NELLIE FRAZIER—White ground tipped rose; each .....	.50
SUNSET—Clear orange, fine; each.....	.35

SHOW AND HYBRID SHOW DAHLIAS

These Dahlias are the closely quilled ball-shaped varieties. The Hybrid or Giant Shows are becoming great favorites on account of their tremendous size.

ANNA REHORST—(H. S.)—Very large flower of deepest shade of purple.....	.50
ESMONDS—The very finest yellow.....	.50
GENERAL HAIG—Best scarlet show.....	1.00
GOLD MEDAL—Canary yellow, flaked red; each.....	.50
JOHN WALKER—Pure white; each.....	.50
MRS. BOTTOMLY—Rosy lilac. Fine for exhibition....	.50
YUBAN—(H. S.)—Yellow striped and speckled red. Perfect form .....	.75

PEONY OR ART DAHLIAS

The Peony or Art Dahlias are of recent introduction, and are extremely popular. Flowers are large, having two to five rows of petals, very broad, and artistically twisted and curled. They usually show the golden center, and have small curling petals clustered around it. They are free-flowering, and their long, straight stems make them a beautiful growing and cutting variety.

COPPER—Copper tinted bronze. Petals fluffy and good stem .....	.50
CREAM KING—A large deep cream.....	.75
ELSA—A good pure white.....	.75
GEISHA—Yellow, heavily suffused with scarlet.....	.50
LIBERTY—Very large light scarlet flowers; each.....	.35
MEYERBEER—A beautiful crimson overlaid with rich maroon. A large and lovely flower.....	.75
MRS. JACK GREEN—Brilliant scarlet, bright and showy .....	.50
MRS. JESSIE SEAL—A charming pink peony and an exquisite dahlia for all purposes.....	1.00
MRS. JOHN BRAY—A good fancy white, splashed crimson	1.00
MT. TAMALPAIS—An unusual shade, best described as Tomato red.....	1.00
NATALIE MAI—Rich burgundy and velvety maroon, with a suffusion of gold.....	1.50
PEARL RUGGLES—One of the most beautiful of the recent novelties. Deep rosy pink and white. Flowers fluffy and full. A good strong grower.....	2.50
PIERRE LE BLONDE—Deep maroon, with a blotch of white at the tip of each petal. Much admired.....	.50
THE BILLIONAIRE—An enormous peony of old gold. Wonderful exhibition variety.....	2.00

DECORATIVE DAHLIAS

Decorative Dahlias are large and usually full to the center, with loosely formed long, flat petals. Many new introductions are remarkably beautiful. Some of the best cut flower varieties are in this class.

AMPHION—Soft mauve pink. Petals unusually long--\$ .....	.50
BYRON—Crimson maroon. Beautiful for a cut flower .....	.50
DELICE—Beautiful clear pink—medium.....	.35
DR. TEVIS—A pleasing combination of salmon and old rose. Immense flowers on strong, stiff stems....	1.00
HARRY DAVIDSON—Mulberry pink tipped gold.....	1.50
JANE SELBY—Delicate rose pink, and true decorative type. One of the best for all purposes.....	1.00
JOFFRE—Deep pink, with white center.....	.75
MINA BURGLE—Flowers are very large—color brilliant scarlet with extra long, stiff stems.....	.35



GEORGE WALTERS
One of Our Favorites

MRS. CARL SALBACH—This is undoubtedly the best introduction of 1920. Lavender pink and very large	3.00
MRS. E. C. BOSTON—The best white decorative.....	1.00
MRS. F. C. BURNS—A lovely shade of shell pink. Always good. Best in heavy soil.....	1.50
PRIDE OF CALIFORNIA—Crimson red, a good cut flower	1.00
PRINCESS PAT—One of the best. Old rose with strong stems. Keeping well as a cut flower.....	2.00
SAN MATEO—Bright yellow striped and splashed scarlet	2.00
SCOTTISH CHIEF—An unusual shade of golden cocoa, sometimes tipped pink.....	.50
SEABRIGHT—Orange buff. A good standard variety .....	.35
THE GRIZZLY—The best velvety maroon. Petals twisted, fluffy and large. Best in heavy soil.....	2.50
THE MILLIONAIRE—This huge dahlia is both an exhibition and garden variety. The outer petals are delicate lavender, center a trifle lighter.....	1.50
MRS. R. R. STRANGE—Burnished copper and bronze. This color is the new shade that is so popular.....	2.00

FRUIT TREES AND SMALL FRUITS

SPECIAL NOTICE TO PURCHASERS

When ordering, please state if substitution will be permitted. When no instructions accompany order, and varieties are sold out, we will substitute similar sorts. The trees when shipped should be unpacked at once on arrival, the roots laid in a trench and well covered with soil and thoroughly watered. Packing charged for at cost of material used.

Write for quantity prices. We offer special inducements to large planters. Five or more fruit trees of the same kind (Example, 5 apples, 5 peaches at the special 10 rate. However, five fruit trees of different fruits are at the single price.

PLANTING—Dig good, large square holes that will take the roots properly and with at least 6 to 10 inches to spare. Spread the roots out carefully and set the tree an inch or so lower than it was grown. Fill the soil in gradually, tramping it well around and under the roots. When the hole is two-thirds filled in give the tree a good bucket of water. Fill in balance of soil when the water has settled. Cultivate frequently to hold the moisture and keep the tree growing naturally and prevent loss by summer droughts. NEVER plant a tree when the soil is too moist or wet. NEVER put manure of any sort in the hole when planting.

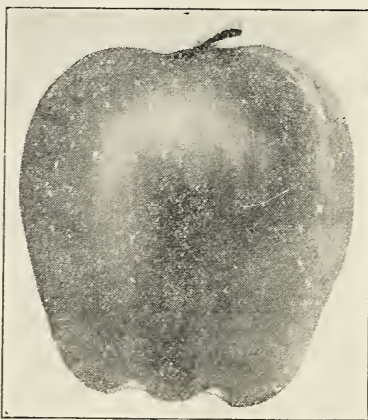
PRUNING MUST be done after the tree is set. You are responsible for the shape of your tree. Commercial trees are cut back very drastically, generally knee-high; however, for back yard orchards we recommend shaping a tree so that it can be easily cared for. Cut back the long side branches to 4 or 5 eyes, leaving only three laterals to form the crown. These should be balanced in different directions. If the tree is just a straight, single growth, cut it off 2½ or 3 feet.

ROOT PRUNING—All roots should be cut back an inch or so to insure a healthy start. Injured or broken roots must also be cut off.

APPLES

Under the law of general average no crop will produce more income per acre than a good apple orchard. The fact that they can be shipped to every part of the world and that there is an ever-growing demand, not only for home consumption, but for export, canning and evaporating, assures profitable prices to growers at all times.

Apples do well in all the Coast counties of California as well as in the foothills and higher altitudes of the Sierras.



DELICIOUS APPLE

Price, 4 to 6 feet, 75c each; \$6.50 per 10.

Summer Varieties

ALEXANDER—Greenish yellow streaked red.
GRAVENSTEIN—Skin yellow, marked deep red.
EARLY HARVEST—Medium size, bright straw color.
JONATHAN—Beautiful brilliant red.
RED ASTRACHAN—Large, deep crimson.
YELLOW BELLFLOWER—Large, smooth. Lemon color.

Winter Varieties

BEN DAVIS—Yellow striped green.
BALDWIN—Deep bright red.
NEWTON PIPPIN—Greenish yellow, fine flavor.
RHODE ISLAND GREENING—Large, greenish yellow, fine grain.
SPITZENBERG—Fine, juicy, crisp, red apple.
STARK'S DELICIOUS—Beautiful brilliant dark red.
KING DAVID—Deep, rich red, one of the best.
RED SIBERIAN CRAB—Yellow and red splashed.
YELLOW SIBERIAN CRAB—Glossy yellow.

PEACHES

The words "California Fruit" and "Peaches" are practically synonymous, for the Peach has become the chief fruit of California. Under our long, glorious summers it attains a size, substance, flavor and keeping quality superior in every way to those grown in other states.



EARLY CRAWFORD PEACH

Price, 4 to 6 feet, 75c each; \$6.50 per 10.

Freestone Varieties

FOSTER—Medium, flesh yellow; sweet and juicy.
STRAWBERRY—White, mottled red near pit; very juicy.
ELBERTA—A standard midsummer freestone.
ALEXANDER—Medium to large; half cling; firm and juicy.
TRIUMPH—Bright yellow, deeply mottled red; part cling.
HALE'S EARLY—Part cling; very early; delicious and juicy.
MUIR—Perfect freestone; flesh yellow; good shipper.
EARLY CRAWFORD—Flesh yellow; rich and of excellent quality.
SALWAY—Fine large late; yellow with red cheek.

Cling Peaches

TUSCAN CLING—Yellow flesh; excellent quality.
ORANGE CLING—Large yellow, dark red cheek, rich and sugary.

CHERRIES

The sun-kissed land of California stands first with the old familiar cry of "Cherries Ripe," for the reason that California cherries are on the market when no other cherries from any other State are available. Price, 4 to 6 feet, \$1.00 each; \$9.00 per 10.

BLACK OREGON—Large to very large; jet black; very firm, dark flesh of exquisite sub-acid flavor.

LAMBERT—An exceptionally large Cherry; black; very firm; juicy and sweet and of a peculiar, yet exquisite flavor.

ROYAL ANN—Pale yellow, richly mottled with red; large to extra large; very firm; juicy and sweet, good eating.

BING—A fine, extra large, black cherry; it is of good eating and good shipping quality.



BLACK TARTARIAN—The standard black cherry; large to very large; purplish black; dark purplish flesh; very juicy and of excellent flavor.

BURBANK CHERRIES

BURBANK—A valuable new introduction by Luther Burbank. A fine, very large black cherry. Flesh purple, firm and of good flavor.

BLACK TARTARIAN CHERRIES

ALMONDS

When pruning young trees leave two or three of the side branches, cutting these back to two or three eyes, as almonds sometimes will not bud from the main stem. Price, 4 to 5 feet, 75c each; \$6.50 per 10.

I. X. L.—Tree a sturdy, upright grower, with large leaves, nuts large; shells easily, no machine being needed nor is any bleaching necessary; shell soft but perfect. It bears heavily and regularly.

NE PLUS ULTRA—Tree a rapid grower; leaves rather large; a heavy and regular bearer; nuts large and very long in shape; soft shell; hulls freely.

NONPAREIL—First called Extra. Of a weeping style of growth, smaller foliage than the I. X. L., but still forms a beautiful tree; an extraordinarily heavy and regular bearer, with very thin shell, of the Paper Shell type.

TEXAS PROLIFIC—Regular and prolific; soft shell; kernel plump and of medium size.

APRICOTS

California practically monopolizes the market of cots as no other section of our country; produces it in quantities at so little expense and small risk of failure of crops. We bud apricots on myrobalan root for heavy moist soils and on peach root for light, well-drained, warm sandy soils. Please specify. Price, 4 to 5 feet, 75c each; \$6.50 per 10.

BLENHEIM—Medium oval, orange.

HEMSKIRK—Flesh bright orange.

MOORPARK—Yellowish green; flesh bright orange.

ROYAL—Early; flesh pale orange; heavy bearer.

FIGS

Price, 4 to 5 feet, 75c each; \$6.50 per 10.

CALIFORNIA BLACK—A well-known local variety. Large dark purple, almost black when fully ripe. Makes a good dried fig. Tree grows to a very large size, and gives immense yield.

WHITE ADRIATIC—Fruit large; skin greenish-yellow color; pulp carnation red. Ripens from August to October.

CALIMYRNA—Large lemon yellow, pulp reddish amber. Dries readily and with less trouble and expense than any other fig. This variety cannot be grown without the Capri Fig, which serves as a home for the minute insects which carry the pollen from the Capri Fig to the female flowers of the Calimyrna Fig.

WILD, OR CAPRI—Must be grown in connection with every Calimyrna Fig orchard.

KADOTA—Medium sized; thin, white skin; pulp white. Never sours when planted in dampest locations. First week in August.

NECTARINES

Price, 4 to 6 feet, 75c each; \$6.50 per 10.

BOSTON—Large, deep yellow, with a bright blush and deep mottlings of red; flesh yellow, without any red at the stone. Sweet though not rich, with a pleasant and peculiar flavor.

HUMBOLDT—Very large bright orange yellow, streaked yellow, flesh orange. Tender and juicy.

THE QUINCE

Price, 4 to 5 feet, 75c each; \$6.50 per 10.

APPLE OR ORANGE—Large; fine golden color; valuable for preserves or flavoring. September.

CHAMPION—Large, bright yellow, ripening two weeks later than orange. September.

PINEAPPLE—Flavor is suggestive of the pineapple. Makes a superior jelly and will cook tender in five minutes. September.

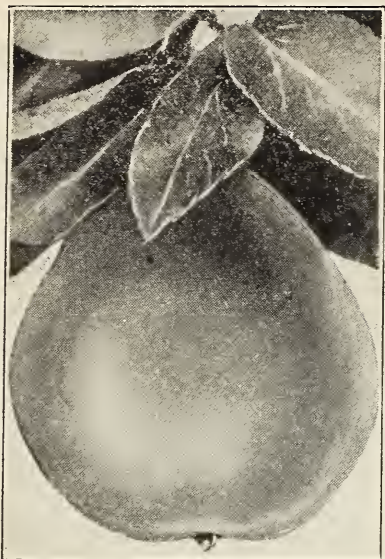
SOUND FRUIT brings profit.

We shall be pleased to advise our customers.

What to spray

When to spray

How to spray



PEARS

The Pear is cultivated very generally in all sections of California, doing well in all soils, succeeding best on a heavy loam. Pears can grow well on alkaline soils where other fruits refuse to bear and often die. Our stock is double worked on Beurre Hardy.

Price, 4 to 6 feet, 75c each; \$6.50 per 10.

BARTLETT—The leading commercial Pear of California for canning, shipping and drying, and more extensively planted than any other. Large; golden yellow, red cheek; thrives in all parts of California. August.

SOCKEL—Quite small; rich yellowish brown; very sweet and productive. Ripe in September.

WINTER BARTLETT—Fruit large, closely resembling the famous Bartlett, but ripening four months later.

WINTER NELIS—Medium size, roundish, yellowish green, dotted with russet. Fine flavor. November to January.

PLUMS

The Plum thrives in all parts of the State and adapts itself from the Coast and Bay regions to the foothills of the Sierras. It is normally a self-fertilizer, however, we recommend planting several varieties for the purpose of cross fertilization to insure heavier and more regular bearing. Price, 4 to 6 feet, 75c each; \$6.50 per 10.

CLYMAN—Reddish purple. Late June.

GREEN GAGE—Yellowish green. Middle of July.

KELSEY—Rich yellow, overspread with red when fully ripe. July to September.

WASHINGTON—Flesh yellow, very sweet. Early August.

YELLOW LEG—Large, oval shape, deep golden color. July to August.

TRAGEDY—(California Seedling)—Medium to large, oblong; purplish blue, with a beautiful deep blue bloom; freestone; flesh greenish yellow, sweet, juicy.

FORMOSA—(Japanese)—One of Burbank's recent introductions. Color brilliant red. Very handsome and showy. Flesh yellow, firm, fragrant and of delicious flavor.

SANTA ROSA—(Japanese)—Particularly valuable on account of its season of ripening.

PRUNES

With the exception of Tragedy and Hungarian, the early shipping green fruit sorts, the following Prunes are used for dried fruit purposes. Price, 4 to 6 feet, 75c each; \$6.50 per 10.

FELLENBERG—Dark purple, flesh greenish yellow. August.

FRENCH—Medium violet purple, rich and sugary. August to September.

GERMAN—Long oval, skin purple, flesh green. August to September.

HUNGARIAN—Reddish violet, with numerous brown dots. September.

SUGAR—Flesh yellow, tender and rich. Early August.

TRAGEDY—Skin dark purple, flesh yellowish green. Early July.

ORANGES

Price, lifted with balls of soil, 4 to 5 feet, \$2.50 each.

WASHINGTON NAVAL—The most popular of any orange grown in California. Very large, solid and heavy; skin smooth and of very fine texture.

VALENCIA LATE—Fruit medium size, oval, solid, heavy; skin very thin and of strong texture; flesh juicy, rich color, fine grain, firm, crisp and of excellent flavor.

LEMONS

Price, lifted with balls of soil, 4 to 5 feet, \$2.50 each.

EUREKA—Medium size; sweet rind; a good keeper and very popular.

LISBON—Fruit medium size; fine grain; sweet rind, very strong acid; very few seeds, and a good keeper.

VILLA FRANC—Medium size; considered to be the best of all lemons grown.

POMELO OR GRAPE FRUIT

Price, lifted with balls of soil, 4 to 5 feet, \$2.50 each.

TRIUMPH—Fruit medium size; smooth, clear and fine grained; juicy and well flavored; very few seeds; tree bears when young.

POMEGRANATES

The natural habit of the Pomegranate is to grow bushy. If pruned heavily it will not bear well.

Price, 4 to 5 feet, 75c each; \$6.50 per 10.

MULBERRY

PERSIAN—Trees of rather slow growth, but bear young and produce the finest fruit of all the mulberries. Grafted, 3 to 4 ft., \$1.25 each.

OLIVES

MANZANILLO—One of the standard varieties for green and ripe pickles. A regular and prolific bearer, \$1.25 each.

MISSION—Fruit medium to large, excellent pickles; makes a superior oil; \$1.25 each.

CHESTNUT

AMERICAN SWEET—5 to 6 feet, \$1.25 each.

WALNUTS

Grafted stock on California black root. Price, 4 to 6 feet, \$2.00 each; 5 for \$8.75.

FRANQUETTE—The standard among walnuts, and commanding a higher price in the market than any other. Nut large, elongated, oval and very attractive in form; kernel full, sweet, with a very rich nutty flavor. Blooms late in spring.

MAYETTE—This ranks with the Franquette as one of the leading commercial varieties. Size large and unequaled as a dessert nut; an abundant bearer; starts late in the spring.

PLACENTIA PERFECTION—A vigorous grower; commences to bear abundantly about the fifth year after planting. An improved Santa Barbara Soft-Shell. Most popular walnut in Whittier district. Nut large; shell smooth and thin; kernel white and sweet.

Walnut Root for Grafting

CALIFORNIA BLACK—Rapid growing and desirable as a stock for grafting or budding; adapts itself to all conditions. Nut medium size; hard, smooth shell.

Price 4 to 6 feet, 75c each.

THE SMALL FRUITS

This term usually applies to the berry family—Blackberries, Raspberries, Currants, Gooseberries, Strawberries, etc. The whole Pacific Slope, wherever fruit soils and sufficient moisture prevail, is adapted to their successful culture. There is almost a continuous growth, and intermittent crop. Every family orchard should have a plot devoted to small fruits, and where the conditions are favorable near to markets they can be made immensely profitable when grown along commercial lines.



NEW OREGON IMPROVED—THE BANNER STRAWBERRY

The strawberry that is desired by the commercial grower and fruit shipper is one of medium to large size, an even and abundant bearer, of good color and texture, sweetly acidulous and melting to the sense of taste, and of robust growth and vitality. All of these characteristics are pronounced in the Banner Strawberry, rendering it alike desirable for the home grower and the market gardener; it is a variety that we can heartily recommend. Extra strong, well-rooted plants, 50c per dozen; \$3.00 per 100.

NEW ETTERSBERG—No. 121—It is very productive of fine red berries that are of large size and have a large, clean-cut green calyx or hull. The plant is extra vigorous and deep rooting and the foliage leathery. The fresh fruit is of fine dessert quality, and for flavor as a canned berry it is the very best, a deliciousness found in no other variety. It is red, and red to the center. It is a great canning sort. 75c per dozen; \$5.00 per 100.

LOGANBERRY

Fruit is $1\frac{1}{4}$ inch long, dark red; as large as the largest blackberry and partakes of the flavor of both the blackberry and raspberry; excellent for table, eaten raw or stewed; makes a fine jelly or jam. Ripe in May. Strong one year old roots, 25c each; \$2.00 per 10.

BURBANK PHENOMENAL BERRY—Cross between California Dewberry and Cuthbert Raspberry. Luther Burbank describes it as the largest berry grown; color, raspberry crimson. Strong one year old roots, 25c each; \$2.00 per 10.

MAMMOTH BLACKBERRY

Supposed to be a cross between the wild blackberry of California and the Crandall's Early. Deep red; enormously productive and exceedingly early; fruit enormous size. Strong one year old roots, 25c each; \$2.00 per 10.

HIMALAYA BLACKBERRY

Imported originally from the Himalaya Mountains. It is a remarkable grower, canes growing 40 feet in a single season; an enormous bearer, a good shipper; berry round; very few seeds and with almost no core. June to late fall. Strong one year old roots, 25c each; \$2.00 per 10.

CORY'S THORNLESS MAMMOTH BLACKBERRY

Canes are so smooth that you can strip the foliage off between your fingers. Absolutely proved to be wonderfully productive and a first rate market berry. Fruits as large as the Mammoth Black, often 2 to $2\frac{1}{2}$ inches in length; practically coreless and nearly seedless. Without hesitation we believe this berry will be the most popular ever sent out. Our stock is from the originator, and guaranteed to be as represented. **SPECIAL NOTE:** Do not confuse with other inferior thornless blackberries. Strong roots at 30c each; 5 plants for \$1.25.



CALIFORNIA LOGANBERRIES

RASPBERRY

CUTHBERT—Standard. Large; rich crimson; good shipper. 15c each; \$1.00 per 10.

GOLDEN QUEEN—Large; golden yellow; fine quality. 25c each; \$2.00 per 10.

GREGG—Standard blackcap; productive and hardy; seeds large; best shipper. 25c each; \$2.00 per 10.

ST. REGIS—Raspberries 4 months after planting. Bright crimson fruit of good size and quality. From June until frost. 20c each; \$1.50 per 10; \$12.50 per 1,000.

SUPERLATIVE—Largest red raspberry grown. Very hardy and vigorous in growth. Matures early. 20c each; \$1.50 per 10; \$12.50 per 1,000.



RANAREE RASPBERRIES—New red sort that is now very popular with the market gardeners. Finest flavor, long season, and a very vigorous grower. Recommended to everyone. Price, 25c each; \$2.00 per 10; \$15.00 per 1000.

GOOSEBERRIES

In the mountains at an elevation of 3,000 feet, and anywhere in the coast regions, the gooseberry thrives and produces an abundance of fruit. Price, 30c each; \$2.50 per 10.

DOWNING—Good size, whitish green. Good.

OREGON CHAMPION—Very large brownish red.

CURRENTS

RED CHERRY—Large, deep red. 30c each; 10 plants, \$2.50

BLACK NAPLES—Berries large, black. 35c each; 10 plants for \$3.00.

GRAPES

Strong roots, 25c each; \$2.00 per 10. 40c each; \$3.50 per 10, as noted.

BLACK HAMBURG—Berries large, round; skin thick, coal black when fully ripe; flesh sweet and juicy; 40c each.

CONCORD—Large, black grape; bunches compact; berries round, sweet and pleasant; 40c each.

FLAME TOKAY—Berries large; skin thick, pale red, covered with bloom; flesh firm, sweet; an old standard variety; 25c each.

ISABELLA—Our most extensively planted Eastern grape; bunches long, large and loose; berries black, oval, juicy and sweet, with distinct musky flavor; 40c each.

MUSCAT OF ALEXANDRIA—Berry, oval, sometimes round; yellowish green; 25c each.

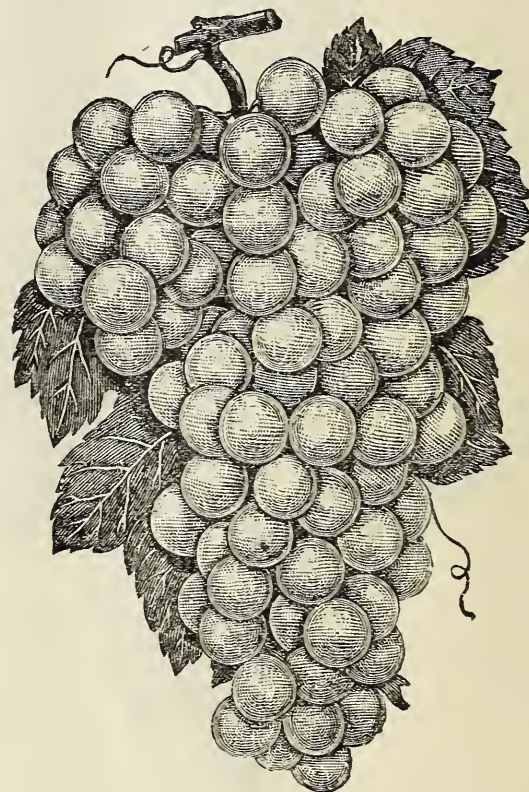
ROSE OF PERU—Fruit round, large with firm and crackling flesh; 25c each.

SULTANA—Bunches long and very compact; berries small, amber colored, seedless; 25c each.

THOMPSON'S SEEDLESS—Identical with the Seedless Sultanas of Asia Minor. Berries greenish yellow, firm, oval, seedless; 25c each.

ZINFANDEL WINE—Berries round, dark purple; the most extensively planted grape in California for making claret; 25c each.

ZANTE CURRANT—(Black Corinth)—Bunches medium; berries small, seedless; skin thin; black; blue bloom. This is the variety producing the currant of commerce, under the name "Zante Currant," of which there are imported into the U. S. annually from Greece over 1,000,000 pounds; 40c each.



VEGETABLE PLANTS AND ROOTS

If ordered by parcel post add postage at zone rates.

We carry the following plants and roots in their season as noted; packing them exceedingly careful to insure safe arrival. Upon receipt they should be unpacked immediately and refreshed by dipping in water for a moment. Plant at first opportunity or heel the roots in soil.

ARTICHOKES—(Jerusalem or Tuberous-Rooted)—Jan. to March. Its potato-like roots are used for hog feed. 1b., 20c; 10 lbs., \$1.50; 100 lbs., write for price.

ARTICHOKE PLANTS—January to May. 10c each; dozen, \$1.00. Weight, 6 lbs. per dozen.

ASPARAGUS ROOTS—Strong plants. January to April. Dozen, 35c, postpaid; per 100, \$2.50.

Palmetto—Best green variety.

Conover's Colossal—Finest white.

CABBAGE PLANTS—All year round. Doz., 15c; 100, 85c; 1000, \$6.00. Weight, 1 lb. per dozen; 4 lbs. per 100. Early or late Flat Dutch varieties.

CAULIFLOWER PLANTS—All year round. Doz., 15c; 100, 85c; 1000, \$6.00. Weight, 1 lb. per dozen; 4 lbs. per 100.

Early Snowball—Small white heads.

Veitche's Autumn Giant—Largest sort.

CELERY PLANTS—March to July. Doz., 30c; 100, \$2.00. Weight, 1 lb. per dozen; 4 lbs. per 100.

White Plume—Easily grown white sort.

Golden Self Blanching—Yellow type.

EGG PLANT—April to June. Doz., 35c. Weight, 1 lb. per dozen; 4 lbs. per 100.

New York Improved Purple—Best sort.

HORSE RADISH ROOTS—January to May. Doz., 50c. Weight, 1 lb. per dozen; 4 lbs. per 100.

PEPPER—April to June. Doz., 35c; 100, \$2.25. Weight, 1 lb. per dozen; 4 lbs. per 100.

Large Bell or Bullnose—Common sweet Bell.

Cayenne—Very long, extremely hot.

Chili—Short, thin, extremely hot.

Anaheim Chili—Best long, pungent, for canning.

Pimiento—Can be eaten like an apple—sweet.

RHUBARB ROOTS—Ready fall and spring.

Strawberry—Very popular, small stemmed variety of extra fine flavor. Each, 25c; 5 for \$1.00. Postage extra, 1½ each clump.

Wagner's Giant—Largest sort grown; usually 2 to 3 feet in length. Every garden should have a few Rhubarb clumps. 35c each; 3 for \$1.00. Postage extra, 1½ each clump.

SWEET POTATOES—April to June. Doz., 25c; 100, \$1.50. Weight, 1 lb. per dozen; 3 lbs. per 100.



TOMATO—April to June. Doz., 30c; 100, \$2.00. Weight, 1 lb. per dozen; 3 lbs. per 100.

Stone—Popular large smooth late.

Earliana—1st Early; medium size.

Chalk's Early Jewel—2nd Early; large.

San Jose Canner—Favorite for canning.

FAVORITE FAMILY HERBS—All year round.

CHIVES, SWEET MARJORAM, SAGE, THYME, MINT
—Plants, 2 for 25c; 30c, postpaid.

TARRAGON—Strong plants, 30c each; 35c, postpaid.

CATNIP—Strong plants, 25c each; 30c, postpaid.

SPRAYING

in some instances is almost as important as planting a crop. We are in a position to offer advice in the control of pests and often suggest kinds of fruits or varieties of vegetables that are less apt to be troubled by diseases or pests owing to their more resistant nature or cropping at a season when pests are easily controlled.

AN UNUSUAL OFFER FOR MAIL ORDER CUSTOMERS ONLY

In San Francisco the thousands of customers at our retail store know the high quality and sure crop of **California Seed Company's Seed**.

To demonstrate this to our out-of-town customers who are just learning to know us we are making the unequalled offers shown below to induce them to select **ALL** their seeds from this catalog.

Mail order buyers should therefore look through the book carefully and make up their own assortments and send them to us as early as possible, so they may not be disappointed in the varieties offered.

This offer is **not good for "Over the Counter" Sales**. Orders for these special offers **must come by mail**.

No. 1 30c Worth of Seeds Look through the catalog and select 30 cents worth of seed you want. Make up your order—packets or ounces—anything—and mail it to us with only 25c and we will send the entire selection postpaid. Only one selection to a family. 25c	No. 2 70c Worth of Seeds Look through the catalog and select 70 cents worth of seed, in packets or ounces—anything you want. Make up your order and mail it to us with only 50c and we will send the entire selection postpaid. Only one selection to a family. 50c	No. 3 \$1.40 Worth of Seeds Look through the catalog and select \$1.40 worth of seed, in packets or ounces—anything you want. Make up your order and mail it to us with only \$1.00 and we will send the entire selection postpaid. Only one selection to a family. \$1.00
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THESE ARE NOT "READY MADE" ASSORTMENTS—BUT ARE PUT UP TO YOUR ORDER

Turn This Page Over for Vegetable Plants, Roots and Berries

STANDARD HORTICULTURAL BOOKS

CALIFORNIA VEGETABLES IN GARDEN AND FIELD—By Prof. E. J. Wickson.—This is the most up-to-date book on our California conditions covering every phase of home and market gardening. Profusely illustrated and written so anyone can apply it to their own gardening. Price, \$2.00. Delivered by mail for \$2.15.

CALIFORNIA FRUITS AND HOW TO GROW THEM—By Prof. E. J. Wickson.—The most accurate compilation of California methods of handling and caring of fruit crops. Thoroughly describing the most successful practices employed by practical farmers. Price, \$4.00. Delivered by mail for \$4.15.

CALIFORNIA GARDEN FLOWERS, SHRUBS, TREES AND VINES—By Prof. E. J. Wickson. Everyone should possess a copy of this most valuable treatise, written very interestingly and well by an expert. Price, \$1.50. Delivered by mail for \$1.60.

THE SIES DAHLIA MANUAL—By H. E. Sies. Absolutely the most up-to-date material on the care and successful culture of this most popular flower. Price, 60c. Delivered by mail for 65c.

ROEDING'S FRUIT GROWERS' GUIDE—By Mr. George C. Roeding. This is the finest book on fruit growing as practiced in California's great valleys. Written by a gentleman who is considered an eminent authority on California conditions. Recommended to anyone caring for or planting a new orchard. Price, \$1.25. Delivered by mail for \$1.35.



Conkey's

TRADE MARK



HAVE A CONKEY CORNER IN YOUR POULTRY HOUSE

Don't
Worry!
Conkey
Will
Cure Me



Keeping Poultry Well—The Key to Success

Raising poultry is pleasant and profitable when "good luck" is with you. Good luck, however, is not merely a matter of chance, but of **BEING PREPARED.**

For more than twenty-five years Conkey has been **THE POULTRY DOCTOR.** Take his advice. Install a *Conkey Corner* of remedies in your poultry house as insurance against disease, trouble, loss and disappointment.

We sell Conkey's Poultry and Stock Remedies on the following guarantee: *Money refunded cheerfully if any Conkey remedy does not satisfy.*

Conkey's ROUP REMEDY (POWDER)



When Roup breaks out there's no time to experiment—start treatment at once—the disease is very contagious.

Cold, rainy, muggy weather and changeable conditions intensify Roup. When birds begin to sneeze, froth in eyes, run at nose or

show other symptoms of a "cold," put Conkey's Roup Remedy in the drinking water. Sick birds doctor themselves and others are protected from catching the disease. Better still, *always* at the first sign of "roupy weather," place Conkey's Roup Remedy in fountains—it's a great preventative. Packages 25c, 50c, \$1.00; 5-lb. can \$5.75 postpaid.

Conkey's ROUP PILLS are for treating individual cases and for use at shows when birds develop colds. Packages 30c, 60c, \$1.20; breeder size (1000 pills) \$3.00; \$3.10 postpaid.

Conkey's CANKER AND BRONCHITIS REMEDY checks cankerous growths and sores and soon restores the bird to normal. This remedy is Conkey's specific

for bronchitis. Also desirable in treating individual cases of Roup and for use at shows when birds develop colds. Package 50c postpaid.

Conkey's POULTRY WORM REMEDY rids birds of many troublesome worms, thus promoting a return to healthy conditions. Give it as soon as you suspect worms—it will help the whole flock. Packages 25c, 50c—30c, 55c postpaid; breeder size, (5 lbs.) \$2.75; \$2.85 postpaid.

Conkey's SCALY LEG REMEDY applied to birds legs will in a few treatments kill the parasites responsible for the trouble and heal up the legs with a healthy lustre. Package 25c postpaid.

Conkey's CHOLERA REMEDY



So-called Cholera, bowel troubles, indigestion, diarrhea and kindred ailments often kill a whole flock in a few days. Diarrhea, a drowsy, listless appearance and great thirst—these are the signals to put Conkey's Cholera Remedy in the drinking water. It usually cools heated membranes and stops the trouble if given in time. Packages 25c, 50c, \$1.00; breeder size, (5 lbs.) \$2.50; \$2.65 postpaid.

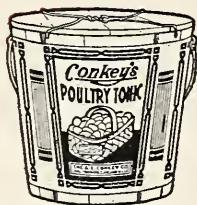
Conkey's POULTRY LAXATIVE

Wherever a laxative or purgative is needed this remedy is just the thing for birds—by varying the dosage you can produce either a mild or a strong effect. Works without a debilitating after-effect. Experts say, and we have found through experiments that a poultry laxative given every week or two not only keeps birds in better condition, but increases the egg yield very materially. Poultrymen who now use Conkey's Poultry Tonic, with such splendid results, will find regular use of Conkey's Poultry Laxative very beneficial. If you are not employing this method, try it and be convinced. Packages, 25c, 50c, 30c, 55c postpaid; breeder size (5 lbs.) \$2.75; \$2.90 postpaid.

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Conkey's POULTRY TONIC



EVERY bird from chick to maturity will be more productive, healthier and more profitable if given a good tonic and regulator. Conkey's Poultry Tonic helps birds get more out of their feed. They produce more eggs and better flesh on LESS FEED, by better digestion and assimilation. Don't keep lazy hens eating their heads off when with a little assistance they can become layers instead of loafers.

Conkey's Tonic is all medicine—free from filler, red pepper, and "hot stuff" to overstimulate the birds and break down their health. Conkey's builds on a natural, healthy basis, inducing steady and persistent laying. Keeps the young chicks growing, makes molting easy, strengthens the bird for bad weather and generally maintains a high health average.

Prices — Buy it by the pail. Packages, 25c, 50c, \$1.00; pails, 12-lb. \$1.60; 25-lb. \$3.00; bags, 50-lb. \$5.00; 100 lb. \$9.50. Parcel post, express or freight charges extra.

Conkey's LICE PREPARATIONS

Conkey's LICE POWDER is for dusting hens, nests, growing chicks and for use wherever body lice must be overcome. Packages, 10c, 25c, 50c; pails, 12-lb. \$1.40; 25-lb. \$2.75. Parcel post, express or freight, extra.

Conkey's LICE LIQUID is for painting roosts, fittings, the inside of house, nest boxes and wherever mites congregate. Cans—qt. 60c; 2 qt. 90c; gal. \$1.50; 5 gal. \$7.00. Parcel post, express or freight, extra.

Conkey's HEAD LICE OINTMENT is for overcoming and preventing the murderous head louse which "eats up" baby chicks. Packages 10c, 25c.

Conkey's LICE FIX is a preparation in ointment form, for fighting body lice. This method is advocated by some authorities as preferable to powder. One application lasts a month. Packages 25c, 50c.

Conkey's SORE HEAD (CHICK-ENPOX) REMEDY—Don't let this disgusting and highly contagious disease get a start. Many a fine bird has been permanently ruined by neglect. Little brown or black warty spots appear on comb, face and wattles. Under these warts is a pocket of virulent pus. Conkey's Sore Head Remedy attacks the trouble from two angles—a powder for the blood and a salve for rubbing on affected parts. Both treatments in package—for one price. This remedy is used for pigeon pox, Plan, warts and similar afflictions. Packages 25c, 50c; 30c, 55c postpaid; breeder size (1 lb. salve, 5 lbs. powder) \$3.50; (10 lb. powder only) \$3.50; \$3.65 postpaid.

Conkey's BLACKHEAD REMEDY—Turkey breeders should have a package ready for instant use, for Blackhead is very hard to cure in an advanced stage. When used soon enough, Conkey's Blackhead Remedy is ordinarily effective. Package 50c; 55c postpaid.

Conkey's POULTRY CONDITIONER—Highly concentrated fowl regulator, blood purifier and nerve food, to build up birds in rundown condition or for fowls recovering from disease. Splendid for putting birds in condition for shows and sustaining them during exhibition. Package 25c, 50c; 30c, 55c postpaid.

Conkey's LIMBERNECK REMEDY (Ptomaine Poisoning) should be kept

on hand as Limberneck is an ailment which must be treated promptly. Conkey's seldom fails to give relief if used in time. Packages 50c; 55c postpaid.

Stock Specialties

Conkey's FLY KNOCKER—Few preparations have the reputation of this wonderful fly repellent. It is a "fly chaser" that does all claimed for it. Dairymen, drivers, horsemen, stock raisers, cattlemen, sheep raisers declare this remedy the best investment they make—animals free from insects do better in milk and butter fat production, while growing stock unquestionably fattens faster when relieved from biting, stinging, disease-spreading insects. Qt. 60c; ½ gal. 90c; gal. \$1.50; 5 gal. \$7.25; 10 gal. \$14.00. Parcel post, express or freight, extra.

Conkey's COW SPECIAL—Used as a tonic to build up cows in run-down condition and as an aid to food assimilation. Packages 50c, \$1.00.

Conkey's STOCK TONIC—A general conditioner of real merit for live stock. Not a food but a medicine—all pure medicine, without any filler. Mix it with regular feed. This makes your own stock food at home. Packages, 25c, 50c; pails, 12 lb. \$2.10; 25 lb., \$3.45; bags, 50 lb., \$4.75; 100 lb. \$9.00. Parcel post, express or freight charges extra.

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Conkey's

THE ORIGINAL

BUTTERMILK STARTING FEED

Raises Husky Chicks

A READY-PREPARED feed for baby chicks and all self-feeding young fowls. Composed of buttermilk, pinhead oatmeal, a special wheat middlings, whole cornmeal, corn feed meal and granulated bone. Contains all elements needed for safely starting baby chicks, ducklings, goslings, poult, pheasants, quail, grouse, etc.

GUARANTEED ANALYSIS

CRUDE PROTEIN 12% CRUDE FIBRE 4% CRUDE FAT 3%
NITROGEN FREE EXTRACT 56% CARBOHYDRATES 60%

THIS superior chick feed was the first commercial poultry feed containing buttermilk—that is why we call it *the* only ORIGINAL buttermilk starting feed.

Conkey's did not "just happen"—it is a scientifically-balanced feed as clean and wholesome and as conscientiously-prepared as "infant food." Selected, plump grains, ground to proper fineness, are combined with other ingredients so as to make the feed readily digestible, palatable and nutritious. TASTE it, SMELL it, that's the way to judge a chick feed.

Conkey's carries buttermilk in just the right proportion as an aid in prevention of bowel troubles, White Diarrhea, "leg weakness," etc. The buttermilk is fresh, concentrated buttermilk, blended with the other ingredients by the ORIGINAL process in such a way as to preserve the appetizing, tonic, and other properties of the newly-churned product.

Lactic acid in buttermilk is described as an "intestinal broom" which sweeps away unfriendly bacteria and disease germs in the delicate digestive tract. Buttermilk is also rich in one of the vitamins necessary to growing birds. It is a wonderful appetizer, aid to digestion and flesh builder.

However, it is not the buttermilk nor the other ingredients alone that causes people to declare that their chicks grow twice as fast on Conkey's. It is not the buttermilk alone

that protects the chicks from disease during the first critical eight weeks. The secret is in the combination of these materials by the Conkey method—the balancing of the ration, as Conkey alone knows how.

Don't be influenced by "cheaper" imitations labeled "buttermilk"—that word may be used to deceive unwary buyers—to cover up a multitude of "sinful" grains, mill sweepings, poisonous weed seeds, musty screenings, worthless by-products, or other poor material having little or no nutritive value.

Conkey's is so palatable that one poultry man said it ought to be used for "breakfast food." One woman wrote: "My chicks just love Conkey's. It is so tasty, and my how they do grow! Better still, we didn't have a single loss in the present hatch, no White Diarrhea or other bowel troubles like before we began using Conkey's."

FEED IT FIRST 8 WEEKS

Conkey's is all the chicks need the first eight weeks except greens, charcoal, grit, clean water and some fine scratch grains in the litter for exercise. Give grit and water from the start. During the second week add green stuff and in the fourth week finely cracked chick grains, like Conkey's Chick Grains.

FEED IT FIRST 8 WEEKS AND THE REST IS EASY!

Conkey's Conkey's Conkey's Conkey's



The Stock Dip, Home Disinfectant and Poultry Mite Liquid with a "Thousand Uses"

This preparation has few equals in all-round usefulness. Every poultry yard, ranch, home, factory, stable, store, office building—in fact, every place where sanitation is necessary to health—needs Conkey's Nox-I-Cide every day in the year.

For poultrymen, Nox-I-Cide is indispensable as a red mite destroyer—paint it on the roosts and spray it into cracks. As a preventive of disease, it is unexcelled for cleansing and disinfecting coops, runs, brooders, fountains, and everything else about the premises. Spray premises daily when disease is present and once a week as a preventive of red mites, ticks, "blue-bugs" and disease epidemics.

As a veterinary wash in treating swine, sheep, stock, etc., Nox-I-Cide is widely used. For mange, itch, ringworm, galls, sores, scratches, sore mouth, eczema, foot rot,

proud flesh and other conditions requiring a disinfectant, Nox-I-Cide is employed. Sheep raisers, swine herds, cattlemen and others praise it highly as a dip and keep it on hand constantly for use wherever an effective germicide or insecticide is needed.

Try it for household use—for assisting in driving out ants, destroying odors, routing out bedbugs and cockroaches, for making sinks, cess-pools, garbage containers, etc., sanitary and safe—in fact, you will find that Conkey's Nox-I-Cide when properly diluted—you mix it with water according to directions—is an effective preparation which easily has the thousand uses ascribed to it.

Fint 45c Quart 70c ½ Gallon \$1.15 Gallon \$1.80 5 Gallon \$8.75
10 Gallons \$17.00 Parcel post, express or freight charges extra

ASK FOR PRICES ON SPRAYERS

Conkey's WHITE DIARRHEA REMEDY

Once you have used this old reliable preparation, you will never be without it. We can't speak too highly of this remedy—advise you not to try to do without it. As a preventive of bowel troubles, White Diarrhea and other digestive complaints, it has given great satisfaction for many years. Once started, diarrhetic conditions often sweep away the whole hatch—hundreds of chicks. Keep Conkey's Remedy in the drinking water until the danger period is past. The loss of one or a few chicks would more than offset the

cost of remedy used. 25c, 50c, \$1.00, Breeder size (1200 Tablets) \$3.50; \$3.60 postpaid.



Conkey's GAPE REMEDY

Gape worms accumulate in the windpipe and choke the chick to death. Don't try to extract worms with a wire or feather when you can get such an effective remedy as Conkey offers. Conkey's Gape Remedy comprises two powders—both in same box for one price—one sifted over chicks causes them to dislodge the worms in windpipe by coughing, the other is a tonic powder which is mixed in the feed—to help the bird build up its resisting powers and retain its vitality. 25c, 50c; sent postpaid for 30c, 55c.



Conkey's Conkey's Conkey's Conkey's

VEGETABLES FOR THE HOME GARDEN

Sowing and Thinning in Open Ground

If you know your seeds to be good, it is a great mistake to sow thickly, as it necessitates heavy thinning, which might have been avoided. It is a great mistake to allow vegetable plants to crowd one another, and if you want a first-class crop you must thin out the plants in the earlier stages of their growth. You will have a larger return from a given extent of land by so doing.

Sow just before or after rain, if possible. Before sowing a crop always dig over the soil; thoroughly manure it, if required, and then reduce it to a fine tilth. Always sow in rows in preference to broadcast, as the former method has many advantages. Avoid deep sowing; a slight covering is enough for small seeds. Half-an-inch covering for turnip, lettuce, onion, radish, and such seed is quite enough; for beet one inch, and for peas about two inches.

SOWING TABLE FOR THE GARDEN

Quantity of Seed Usually Sown per Acre

Alfalfa	lbs. 20	Egyptian	lbs. 6	Milo Maize, drills	lbs. 10
Artichoke, Globe	oz. 1	Jerusalem	lbs. 6	Oats	lbs. 80
Artichoke, Jerusalem	lbs. 300	Kaffir	lbs. 10	Okra	lbs. 10
Asparagus	oz. 5	Kaffir, broadcast	lbs. 50	Onions, seed for dry bulbs.....	lbs. 4
Barley	lbs. 100	Cress	lbs. 5	Seed for sets	lbs. 50
Beans, Bush, drills	lbs. 80	Cucumber	lbs. 2	Sets	lbs. 250
Bush, Lima	lbs. 50	Egg Plant	oz. 4	Parsley	lbs. 6
Pole, hills	lbs. 40	Endive	lbs. 3	Parsnip	lbs. 8
Pole, Lima	lbs. 40	Flax for Seed	lbs. 30	Peanuts	lbs. 22
Beet, Table	lbs. 6	Flax for Fiber	lbs. 50	Peas, drills	lbs. 90
Stock	lbs. 8	Grass, Bermuda	lbs. 8	Broadcast	lbs. 150
Sugar	lbs. 12	Brome	lbs. 40	Pepper	oz. 8
Broom Corn, drills.....	lbs. 12	Crested Dogtail	lbs. 25	Potatoes, cut tubers	lbs. 600
Broccoli	oz. 6	Ky. Blue pasture	lbs. 50	Sweet	plants 8000
Brussels Sprouts	oz. 8	Ky. Blue for lawns.....	lbs. 150	Pumpkin	lbs. 3
Buckwheat, broadcast	lbs. 48	Orchard	lbs. 40	Radish	lbs. 12
Cabbage, early	oz. 8	Rye, Peren, pasture	lbs. 40	Rhubarb	oz. 4
Late	oz. 8	Rye, Peren, lawns	lbs. 75	Rye	lbs. 100
Carrot, table	lbs. 6	Rye, Italian	lbs. 30	Salsify	lbs. 10
Stock	lbs. 5	Red Top	lbs. 30	Sorghum for fodder	lbs. 150
Cauliflower	oz. 4	Timothy	lbs. 20	For Syrup	lbs. 10
Celery	oz. 4	Hungarian	lbs. 40	Spinach	lbs. 10
Clover, Alsike	lbs. 10	Mesquite	lbs. 35	Squash, bush vars	lbs. 4
Crimson	lbs. 15	Hemp	lbs. 50	Running	lbs. 3
Egyptian	lbs. 12	Kohl Rabi	lbs. 2	Tobacco	oz. 2
Japanese	lbs. 20	Leek	lbs. 4	Tomato	oz. 2
Red	lbs. 15	Lettuce	lbs. 3	Turnip, broadcast	lbs. 3
White	lbs. 15	Melon, Musk	lbs. 2	Drills	lbs. 2
Corn, Sweet	lbs. 14	Water	lbs. 4	Rutabaga	lbs. 3
Field	lbs. 10	Millet	lbs. 50	Vetches, broadcast	lbs. 50
For Fodder	lbs. 150	Pearl, drills	lbs. 6	Wheat	lbs. 100
		Pearl, broadcast	lbs. 30		

ON ROTATION OF CROPS

Cabbage, Cauliflower, Potatoes, Peas, Beans

To get the best results in the vegetable garden it is most necessary that different kinds of crops follow each other. Under no circumstances should Cabbage follow Cauliflower, or Carrots succeed Parsnips; each crop should be as dissimilar as possible from its predecessor; a spindle rooted crop should succeed a fibrous rooted crop or vice versa.

Land which has been planted in the spring with early Potatoes may be used with great success for an autumn crop of Cauliflower or Cabbage, especially if the Potatoes have been well fertilized with stable manure as they should be, when the manure is obtainable; if put on as thickly as one load to 240 square yards (12x20 yds.), it will not be too much

and good crops will result. Peas, Beans, Carrots, Parsnips may follow after the Cauliflowers or Cabbages are off, and would not require any more manure. Carrots, Parsnips or Beets should never be sown on freshly manured land, or they will grow mis-shapen and "forky." Cauliflowers, Cabbages or any others of the same family will follow well after Peas or root crops, providing the land is well manured for them; they are gross feeders and the more manure the better the crop.

If the garden is systematically worked in the rotation suggested, and regularly fertilized, good results should be attained.

NUMBER OF TREES OR PLANTS TO AN ACRE

Set at Regular Distances Apart

Distance apart	No. of Plants	Distance apart	No. of Plants	Distance apart	No. of Plants
3 by 4 inches.....	522,720	4½ by 4½ feet.....	2,150	14 by 14 feet.....	222
4 by 4 inches.....	392,040	5 by 1 feet.....	8,712	15 by 15 feet.....	193
6 by 6 inches.....	174,240	5 by 2 feet.....	4,356	16 by 16 feet.....	170
1 by 1 foot.....	43,560	5 by 3 feet.....	2,904	16½ by 16½ feet.....	160
1½ by 1½ feet.....	19,360	5 by 4 feet.....	2,178	17 by 17 feet.....	150
2 by 1 feet.....	21,780	5 by 5 feet.....	1,742	18 by 18 feet.....	134
2 by 2 feet.....	10,890	5½ by 5½ feet.....	1,440	19 by 19 feet.....	120
2½ by 2½ feet.....	6,960	6 by 6 feet.....	1,200	20 by 20 feet.....	108
3 by 1 feet.....	14,520	6½ by 6½ feet.....	1,031	25 by 25 feet.....	69
3 by 2 feet.....	7,260	7 by 7 feet.....	888	30 by 30 feet.....	48
3 by 3 feet.....	4,840	8 by 8 feet.....	680	33 by 33 feet.....	40
3¾ by 3½ feet.....	3,555	9 by 9 feet.....	537	40 by 40 feet.....	27
4 by 1 feet.....	10,890	10 by 10 feet.....	435	50 by 50 feet.....	17
4 by 2 feet.....	5,445	11 by 11 feet.....	360	60 by 60 feet.....	12
4 by 3 feet.....	3,630	12 by 12 feet.....	302	66 by 66 feet.....	10
4 by 4 feet.....	2,722	13 by 13 feet.....	257		

DISTANCE FOR PLANTING

Standard Apples	25 to 30 feet apart each way	Peaches and Nectarines	20 to 24 feet apart each way
Standard Pears	20 to 24 " " " "	Apricots	24 to 30 " " " "
Strong-growing Cherries.....	20 to 24 " " " "	Grapes	7 to 10 " " " "
Duke and Morello		Currants and Gooseberries	4 by 6 feet
Cherries	18 to 20 " " " "	Raspberries and Blackberries	3 to 4 by 5 to 7 "
Standard Plums and		Strawberries for field culture.....	1 to 1½ by 4 to 5 "
Prunes	20 to 24 " " " "	Strawberries for garden culture.....	1 to 2 feet apart

A FEW HINTS FOR THE AMATEUR GARDENER

The pleasure to be derived in the cultivation of flowers and vegetables is only known in its fullest extent by those who have watched every day's mysterious growth from the tiny seed leaf to the grand display of the full developed plant. To all such there must come now and again, in spite of good seed and careful management, unaccountable failure and disappointment. Experienced gardeners sometimes fail and try again with the same seed and succeed; so do not be disheartened by an occasional failure. Unfavorable seasons, insect enemies, and a host of adverse circumstances have to be contended with.

In making a selection of flowers, everyone will of course grow the beautiful Annuals and Perennials. A small collection will furnish plenty of flowers for cutting all the summer

—the Aster, Antirrhinum, Balsam, Dianthus, Delphinium, Pansy, Petunia, Phlox, Drummondii, Portulaca, Salpiglossis, Stock, Verbena, and Double Zinnia, should be in every garden. For a low hedge nothing is better than the Sweet Pea and the tall Nasturtium. Then for fragrance there must be beds of Mignonette, Sweet Alyssum, Pinks, Picotees, and Carnations. For masses of color and ribbon borders there is a large choice—the Phlox Drummondii is of many distinct colors, from white to purple, and so constant in bloom that it is one of the best for this purpose. Candytuft is small and neat, and useful for button-hole bouquets. A few Everlastings and Ornamental Grasses will come very useful about winter time. Then the Gladiolus is a king among tall summer flowers, as the Dahlia is queen of autumn; while Lilies are unsurpassed by any of Flora's treasures.

FLOWER GARDEN

What to Sow and When to Sow

ANNUALS are those plants that flower and mature their seed within a year after they are sown, and perish. This definition is in no way changed by the fact that many Annuals may be managed as Biennials, or, in other words, be sown in autumn for flowering early the following season.

TENDER ANNUALS are those that require heat, and will not vegetate in the open ground until settled warm weather.

HALF-HARDY ANNUALS are those that will bear a slight frost, and may be sown in the open ground a little earlier than the tender Annuals.

HARDY ANNUALS are usually those which require no artificial heat during any period of their growth—every stage of their existence, from the time of sowing the seeds to maturity, being passed in the open ground.

BIENNIALS are those plants that flower the second and sometimes the third year after the seed is sown, and then perish.

PERENNIALS are those plants that live and generate their species for several years successively.

BIENNIALS AND PERENNIALS are Tender, Half-Hardy and Hardy.

TENDER BIENNIALS AND PERENNIALS, or greenhouse plants, are those that require artificial heat to protect them from the frost.

HALF-HARDY BIENNIALS AND PERENNIALS are those that require a slight covering of straw or litter during the cold weather.

HARDY BIENNIALS AND PERENNIALS are those that will stand the coldest winter weather without protection.